

\$12.00

FLYING the ALASKA HIGHWAY

A Supplementary Chart Package



Cessna 185 taking off at Sikanni Chief air strip (Mile #164)



Koidern River and Pickhandle Lake between Burwash and Beaver Creek.

POLAR
PAM
5669

POLARPAM



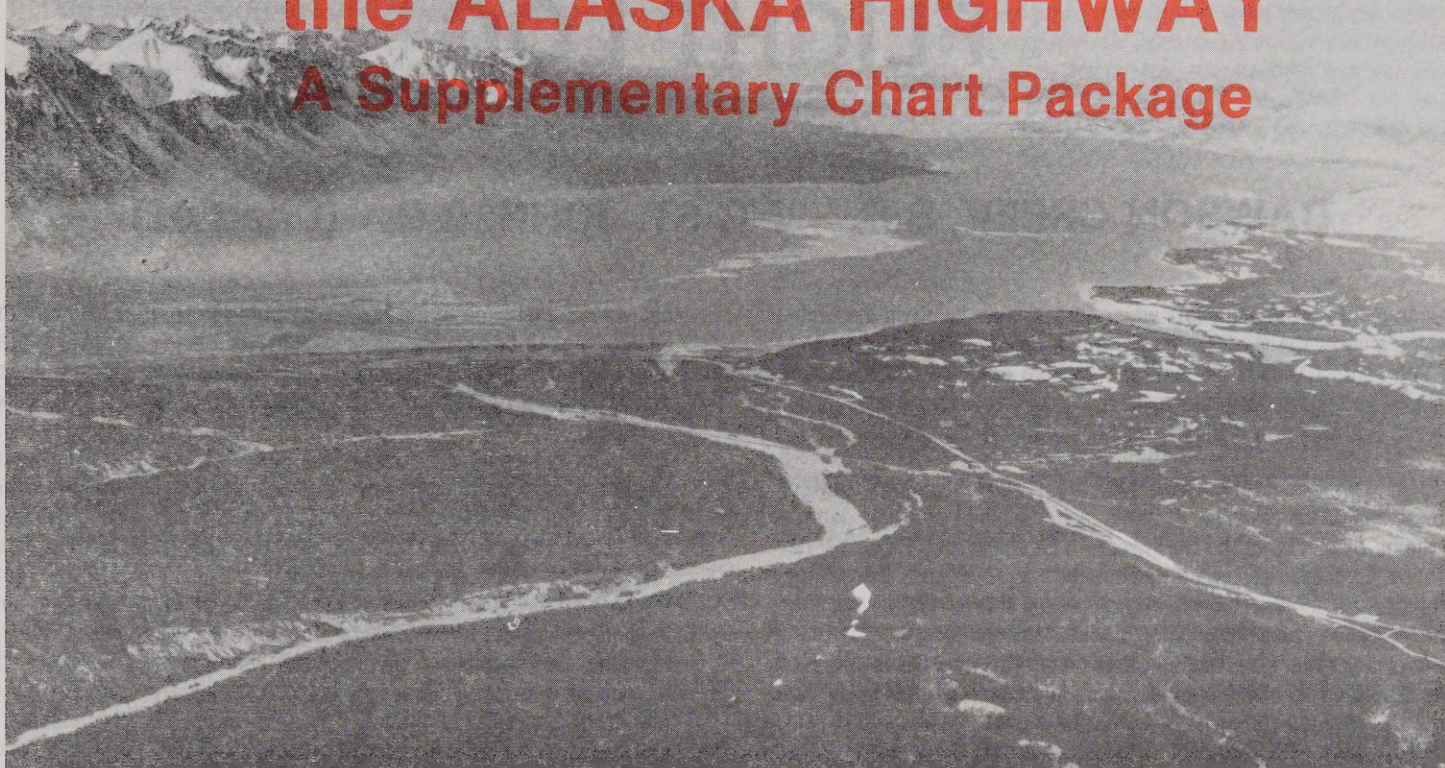
Narrow valley west of Toad River Mile #422. (Muskwa Range in the distance).



Low level stratus cloud at White River mile #1167. (Miles Ridge in background).

FLYING the ALASKA HIGHWAY

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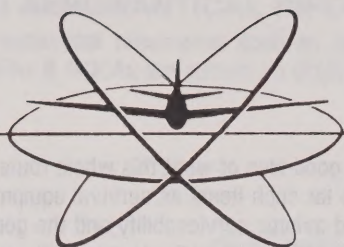


Kluane Lake and valley paralleled by the 19,500 ft. St. Elias Mtns.



Looking westward along the Macdonald River (between Summit Lake and Toad River).

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FOREWARD

With the greater increase of air travel by tourists combined with speculation of a major pipeline, a continued level of concern is being expressed over the increase of accidents along the Alaska Highway Corridor -between Dawson Creek, B.C. to Fairbanks, Alaska. This has prompted a joint venture between Skylark Aviation Ltd. of Calgary, Alberta and Transport Canada, to produce an information package which provides pilots additional information in order to help curb this high accident rate.

This chart package uses a different approach by way of utilizing aerial photographs, narrative descriptions, and graphic illustrations of each route segment. It is hoped that this new approach will better prepare the pilot unfamiliar to the area in question. As an operational aid in both pre-flight planning and in actual flight, these charts are to be used FOR REFERENCE ONLY and in conjunction with the new Alaska Highway 1:500,000 scale VFR Navigation Chart or the 1:1,000,000 world aeronautical chart and Class I NOTAM.

Although this chart package contains information from a wide variety of sources, it does not provide ALL the available data one requires for a route of this size. A cockpit guide for complete airport facilities is required. Consult either the VFR supplement available through the Canada Map Office or obtain Skylark Aviation Ltd.'s publication "ON TRACK" ... the Pilot's Air Travel Guide. These Alaska Highway Supplementary Charts are designed to be inserted into ON TRACK's binder format.

It is our hope that you will find this package both informative and useful for your journey along this beautiful and challenging wilderness route.

Skylark Aviation Ltd. gratefully acknowledges the assistance provided by Transport Canada and to those others who have contributed greatly to its completion.

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Jerry M. Wolsky

President
SKYLARK AVIATION LTD.

NOTE

Use in conjunction with current visual
aeronautical charts and Class I NOTAM.

Aeronautical information current as of June 1st/81
(Revised edition)

LEGEND

A) NARRATIVES

The narrative descriptions on each route attempt to highlight important flight facts which are obvious and those that are not so apparent. Consultation with pilots, FSS and WX personnel have provided the basis for the information contained within. To help the reader develop a mental picture of the Alaska Highway, these are best read while used in cross-reference with the air photos and illustrations on each chart.

B) GRAPHIC CHARTS

The Flight Planning Chart (#1) outlines the general area of North western Canada and the Southern portion of Alaska. In addition, the remaining 13 Charts are outlined together with a profile graph depicting significant topographical features along a five nautical mile corridor of the highway.

Comprised of two basic colours and printed back to back, each folding chart covers an area of approximately 100 NM. Read from bottom to top, by turning the face charts from right to left the reverse chart is positioned for viewing. The Red denotes highlights, special interest items and cautionary notes, while the Black colour makes up the remaining standard topographic and aeronautical information. Grayed background shading contrasts the lakes and river systems in White. Gravelled portions of the highways are illustrated in dash lines and the paved sections are in solid. Airways have Minimum IFR Altitudes plotted to show altitudes required in order to maintain obstacle clearance and continuous radio reception. Mountain peaks and their elevations that are most likely to be used for navigation on a clear day are described along the highway sections.

AERIAL PHOTOGRAPHS

Air photographs attempt to display important junctions, valley entrances and general terrain features. Taken at various altitudes (the average being approximately 3000 AGL) they best portray what one would visualize along each highway section. The photographs are numbered to correspond with those same numbers positioned on the graphic portion of each chart. Small arrows show the approximate direction of each photograph in relation to the highway.

MILAGES

Milages shown are from AIRPORT to AIRPORT via normal arrival and departure routes. As air miles along the highway result in a somewhat shorter total accumulation of mileage than actual road miles depict, slight adjustments on the mileage charts have been made. Mileage charts are easy to use and allow the user to determine exact mileage to fly from various check points along the way. Distance to go or distance to return from any point is readily extracted. Selection of the highway routes or alternates such as the Railroad, River or Airways depends not only on weather and winds, but of distances which your aircraft is capable of handling safely. As Aerodromes are farther apart than most are accustomed to, "radius of action" to the same base may not be possible. Check these milages carefully and plan accordingly.

MINIMUM SUGGESTED VFR ALTITUDES

These altitudes are listed to enable a pilot to determine the minimum safe altitude along an unfamiliar route segment. The are calculated according to highest terrain features and obstructions along the immediate vicinity of the highway, with a buffer zone of approximately

A first reading will give you a good idea of what this whole route has in store. Pre-flight preparation for such items as survival equipment, adequate clothing, aircraft and avionics serviceability and the general attitude of the pilot in flying this sub-arctic terrain will greatly enhance one's chances of having a successful trip. Heed the advice of those familiar with the route. It could save your life.

500 feet. In most cases, this allows for terrain clearances but may not necessarily allow for a 180° turn especially in narrow valleys. Twin-engined aircraft may be required to slow down considerably and increase these suggested minimums for greater safety. Pressure differences, below standard temperatures and altimeter error may warrant flying higher than that altitude indicated on each chart.

MINIMUM RADIO RECEPTION ALTITUDES

These have been determined by actual flight. The approximate reception range to be expected, takes into consideration natural mountain barriers and station output. This may vary depending on atmospheric conditions and the performance of each aircraft radio. Flight Service Stations most likely to respond to your transmissions are bracketed.

HEADINGS

Plotted in Red, headings along the highway are calculated on the average track. Headings of valleys, rivers or roads that may cause confusion and lead you into a box canyon have also been plotted with a corresponding DO NOT ENTER cross. When airborne, they are useful in determining whether a wrong turn has been made so that corrective action may be taken to get back on track.

On areas of the highway where numerous heading changes are encountered, an average track has been drawn. Radials from VOR's have been plotted to help determine call-up points when nearing the airport.

FREQUENCIES

Frequencies of Flight Service Stations and Towers are shown together with hours of operation and VHF direction finding capabilities if available. Airliner frequencies are shown to enable a greater range of transmission between high altitude enroute aircraft and aircraft in distress. Use these with discretion and only after normal communication channels are exhausted. These are especially helpful in valleys and off airways where terrain presents a barrier.

NAV AIDS

Nav aids for this route are primarily situated at the major centres and in most cases can be received along entire routes by aircraft flying in excess of 10,000 ASL. Mountain ranges, ore deposits, atmosphere disturbances, night effect etc., can reduce the effectiveness of LFIMF. Radio stations and frequencies are listed to provide some guidance. REMEMBER: the entire route except the immediate vicinity of Fairbanks, Alaska is WITHOUT radar coverage.

VHF Direction Finding is available at the major centres. It is intended to provide assistance to lost aircraft and to provide checks if uncertain of your aircraft position. Range is limited by aircraft altitude and natural obstructions.

C) AERONANTICAL INFORMATION

Aeronautical information such as nav-aid frequencies and airway MEAs & MOCAs are current as of (date) and can be verified by refer-

ing to current visual aeronautical charts and Class I NOTAM.

FLIGHT LOG

DAWSON CREEK, B.C. - FAIRBANKS, ALASKA

DAWSON CREEK, B.C. - FT. ST. JOHN, B.C. (Chart #2)

Yukon or Alaska bound pilots who originate their flights in the United States east of the Rockies usually make Calgary, Alberta their point of entry into Canada. Customs is available on a 24 - hour basis in Calgary and pilot supply stores have all the necessary charts for the Alaska Highway trip if they have not previously been obtained.

LOG: The Alaska Highway, Mile Post "0", begins at Dawson Creek, but flight planning is better accomplished at Ft St John, a distance of 35 NM to the Northwest. Ft St John has a Flight Service Station for flight assistance and trained meteorologists for weather briefings. Dawson Creek has at the present time a weather observer and a newly established Flight Service Facility.

Before departure from Dawson Creek airport, check for traffic with Flight Service on 122.1 prior to taxiing to the active runway. Set OBS on 288 radial of Ft St John 114.2 VOR if proceeding via V-326. Tune in Ft St John NDB 326 Mhz if following Amber 2, or for homing if following the highway. Airborne from Dawson Creek, the paved

highway can be seen to the Northwest of the town. (See photo). Proceed to the right hand side of the highway as soon as possible to prevent conflict with VFR highway traffic proceeding in opposite direction. The town of Dawson Creek is surrounded by beautiful rolling farmland.

The deep gullies of the Kiskatinaw River are the first significant check-points. Two bridges can also be observed, one for the main highway and the other to the right is a trestle bridge for the railroad. The terrain rises several hundred feet from this point to the Peace River. Observe the CN communications tower positioned to the right of the highway 8 NM north of the Kiskatinaw River and note the minimum suggested VFR enroute altitude if WX is marginal. Prior to reaching the Peace River, contact Ft St John Control Tower and advise position. Bridge and pipeline both cross the river from Taylor on the north shore. (See photo). Taylor is an industrial community clustered around a Pacific 66 gas process plant. Ft St John airport is located 3.8 NM East of the town.

*

FT. ST. JOHN, B.C. - FORT NELSON, B.C. (Charts #3,4,5)

Ft St John has a major airport providing all amenities such as fuel, servicing, charts, supplies and flight planning and WX services. Flight Service Station and WX personnel are very knowledgeable of the area and consultation with them is highly recommended.

The Ft St John to Fort Nelson leg is presumably the most challenging segment as it continually tests the pilot's ability as a navigator. Whether the flight to Fort Nelson is flown via the highway, railroad or airway, it provides a sample of what can be expected for the duration of the journey to Fairbanks, Alaska.

Flying the Alaska highway will expose the newcomer to various surface activities. The most prevalent being the construction of new service roads. These service roads, freshly cut and graded can be mistaken for the Alaska highway itself. Extremely careful map reading can prevent wrong turns at these intersections. The Alaska Highway was built some 35 years ago and plant growth along this artery can lead you to believe that you are following a secondary road. This important point has contributed to many accidents in recent years.

Some simple rules to remember with respect to WX are as follows:

If Ft St John is reporting a consistent cloud cover for the entire area, use the following guidelines:

- A 1000 ft overcast condition would probably cover area between WONOWON and beyond if following the Hwy, and would make passage thru the MILLIGAN HILLS region questionable if contemplating the Railroute.
- A 1500 ft ceiling would allow safe passage thru the MILLIGAN HILLS area if using the suggested VFR MEAs.
- A 2000 ft ceiling would cover the MASON CREEK (Mile 170) region and passage is questionable.
- If WX at Fort Nelson is reporting 1000 overcast the PROPHET RIVER area to TRUTCH MTN (Mile 200) could be blocked (elevation difference between Ft St John and Fort Nelson is 1027 ft).

The Ft St John to Fort Nelson leg can best be described in the following three narratives:

- Highway Log
- Railroad Log
- Airway Log



HIGHWAY LOG: After departure from the Ft St John airport, proceed over the downtown portion of the City and parallel the paved highway. Charlie Lake can be seen in the distance when heading approximately 280°.

The Ft St John/Pickell strip (Mile 51) is situated on the north side of the highway, in an E-W direction approximately 2 NM east of the Charlie Lake community (Mile 52).

Ft St John/Tompkins (Mile 52) strip parallels the north bound access road leading to Charlie Lake. Circular trailer courts are located due east. The paved Hudson's Hope Highway #29 leads to the W.A.C. Bennett Dam and Williston Lake. Circuit height is 3700 ASL.

NOTE: Low lying fog in the Peace River Valley will on occasion reduce flight conditions to "below VFR" at Ft St John airport. With Tompkins (Mile 54) strip edging the PCZ and being 400 ft. higher in elevation, one could land here until "Special VFR" is possible. Ft St John/Pickell strip is slightly longer but provides no fuel or services.

Terrain for the next 50 NM is slightly rolling with large cleared farm fields breaking up the largely forested areas. Mixed coniferous and deciduous forests result in beautiful colours in the late summer and early fall. As the breaking of land is carried out every year, wind-rows of ploughed tree stumps and roots are set on fire. Smoke and haze can cause reduced visibility for the entire area.

Three CN communication radio towers are located at MILE 64 on both sides of the highway. The highest tower is 280 ft. AGL and caution is advised if low level. Note suggested minimum VFR enroute altitude. At MILE 73 (see photo) the highway turns sharply to approximately 220° after passing over a large cleared area. On the left hand side of the highway is an auto service centre, trailer courts, a ranch house and horse corrals. The access road on the right heads north to the B.C. railroad and Beatton River settlement.

Caplin Lake and a process plant with towers, flare-pots, storage tanks and housing units are found at MILE 87 nestled in the trees. Many seismic and pipeline right-of-ways are cut out of the bush. Farming activity becomes almost non-existent for the duration of the route. Cross check with Ft St John VOR on the 282° radial (33NM). MILE 93 denotes the end of the paved highway until reaching Fort Nelson. In the summer, during dry windy days, expect to pick up "dust trails" produced by automobiles travelling the Alaska highway for the next 40 road miles.

MILE 95 (see photo) is the access road to the Halfway River and a water pit is located adjacent to its junction. Numerous seismic lines in the area could be mistaken for the main highway. A new section of the highway is being constructed beginning at MILE 96 for the next five miles to be operational in 1979. An old abandoned flight strip is located between the loop of the old and new section of the Alcan. Status unknown, rwy heading 160° - 340° approximately 3000 ft. in length. Rwy appears to be covered by willow growth.

VFR check-points in the Wonowon (Mile 101) area are the CN radio tower and the "Blueberry" forestry look-out tower. Manned in the summer time during forest fire season, rangers usually monitor 122.9 Mhz. Logging activity around the town has resulted in large block-cut areas highly visible from the air. Terrain rises from Mile 101 to Mile 125. Bad weather may be encountered here to as far as Prophet River, although station reports at Ft St John and Fort Nelson report clear conditions.

Beyond Wonowon a wilderness area is encountered consisting mainly of broken forest with few ranches, but numerous creeks and small lakes. The distance from the Rocky Mountains is approximately 40 NM. The highway parallels the Blueberry River and its prominent valley. Road construction here is in various phases of completion in efforts to straighten the numerous curves for the next 25 road miles. Many portions of the new road already graded and packed could be used as an emergency landing area until in full operation. At the source of the Blueberry River, the river splits into two small valleys which are visible for many miles.

Located to the left side on a knoll, a 300 ft CN communications tower is situated at MILE 125 and marks the rise of the minimum VFR altitude to 4300 ASL to as far as Pink Mountain Lodge. At Townsend Creek source a log cabin is located on the SW side of the road adjacent to the turn-off to the access road. The road leads to oil fields to the NNW. Beatton River valley swings down from the NW to within 4 NM of the Alcan and is very prominent.

Between MILE 125 and Pink Mountain the forested area is thicker with rolling hills in all quadrants. Large gravel pits are located on all sides of the access road at MILE 137.

Located at MILE 143 (see photo) is Pink Mountain airstrip and Motor Lodge. An airstrip is located 1 NM south on the Cypress River Road. The lodge is located on the north side of the highway. Sikanni Chief #147 airstrip is visible in the distance. Minimum VFR altitude rises to 4800 ASL.

Sikanni Chief MILE #147 airstrip parallels the highway adjacent to the north side. USE CAUTION when approaching as aircraft may be taking-off or landing. Best to cross strip at midfield and pick-up highway when clear of the circuit area. Circuit Ht. 4200 ASL. Pink Mtn. (5863 ASL) and Lilly Lake is located 8 NM to the SW. VOR reception with Ft St John is possible above 6500 ASL.

At MILE 154 the Alaska highway enters the Pink Mountains and terrain rises to 4100 ASL. With poor VFR conditions low clouds usually linger in and around the crests from here to MILE 233 (Trutch Mtn). If WX does not permit flight at suggested VFR minimum for this sector, hold at Sikanni Chief #147 or Sikanni Chief #164. Terrain features do not allow for circum-navigating in this area.

At MILE 156 another CN radio tower is located on the north side of the highway. MILE 161.5 (see photo) Sikanni Chief Hill is identifiable by a switch-back leading down to the river, with a huge gravel pit situated on the crest of the hill. Sikanni Chief Lodge adjacent to the river. Sikanni Chief #164 airstrip is visible from this point.

MILE 164 is the Sikanni Chief #164 airstrip which is tangent to the Alcan. USE CAUTION when approaching, as many small aircraft use #164 as a mid-way fuel stop to Fort Nelson if westerly winds deplete fuel reserves. Best to fly overhead at midfield and rejoin the highway when clear of the circuit. Circuit Ht. is 4200 ASL.

Terrain again rises to the summit of Trutch Mountain (Mile 190.5). Mason Creek (Mile 170.5) is identifiable from the air by an auto service station on the right side of the highway. Buckinghorse River (Mile 175) has an emergency airstrip if required, located adjacent to the west side of the highway, orientated in an E-W direction along side the river.

Trutch Mtn. (Mile 190.5) with an elevation of 4134 ASL is the second highest summit along the entire Alaska Highway. The highway follows along the upper ridge of Trutch Mtn. (see photo) and changes to a northeasterly direction paralleling the Minaker River.

Expect WX to obscure the hill tops in this area. If cloud decks are low and uniform, with flight visibilities greater than five miles, flying the opposite side of the highway along the Minaker River around Trutch Mtn. (see photo) and re-joining the highway at Trutch townsite is possible. Use of the aircraft landing lights in the above procedure is most advisable for safety. From this area, depending on the WX conditions, the Prophet River can be followed all the way into the Fort Nelson airport where lower ground is available. The highway from Trutch Town to Prophet River Town presents no special problems until reaching the junction of the new and old highways, 4 NM north of the town (see photo).

The highway which swerves NE, enters higher ground and turbulence and WX could preclude adequate separation from the terrain. Here again, following the Prophet River may be required. The new highway is straight and wide and is suitable for an emergency landing if required. It descends approximately 1000 ft. into the Fort Nelson area and communications is possible along this entire section. Establish contact with Fort Nelson FSS as soon as possible and advise position at the gas process plant which, on a clear day, is visible for 30

nautical miles. NOTE that the VOR at Fort Nelson is west of town in the Poplar Hills region and homing in on the ADF is your best bet. If

assistance is required, do not hesitate to use the V DF Steer facilities at the airport.



The B.C. Rail Route from Ft St John to Fort Nelson is the preferred alternate route if airways cannot be followed or if winds, turbulence, or WX reports give any indication that the area between Sikanni Chief and Trutch Mtn. would be obstructed by low ceilings and reduced visibilities. Several factors either singular or combinations of these would determine if this route is to be taken. Although some pilots prefer the added assurance of a road to land on in the event of an emergency; and 80 and 100 octane fuel is available at Sikanni Chief #164, the B.C. Rail Route does have the following features:

- 1) The distance is approx. nine nautical air miles shorter.
- 2) Westerly winds (average from 200° - 230° at 10-15 kt.) cause head winds and turbulence for a longer period of time (approx. half the distance) whereas the Rail Route, due to its more Northerly direction, may provide a tailwind for up to 2/3's of the distance. This depends on the winds in the Fort Nelson area, and the type of aircraft flown.
- 3) Radio Reception is possible for longer distances due to less obstruction.
- 4) Terrain rises along the Alcan route are as high as 1850 ft. greater than the Ft St John airport elevation of 2280 MSL, and this extends to approximately 100 NM from Wonowon to Trutch Mtn. The Milligan Hills is the only real problem area, for terrain rises approximately 900 ft. and this is for a very short distance.

RAILROAD LOG: Briefly, this route takes one through an area that consists of slightly rolling hills to the Milligan Hills region (approx. 90 NM) at which point lower terrain, consisting of flat, mostly wooded swamps, dominates to the East. WX encountered along this route will be experienced either as an upslope condition along the Milligan Hills (north ridge) when winds are from the NW, North or NE or as low lying fog in the mornings, due to the vast wooded swamp and muskeg region. This could delay departures until mid-day.

Prior to departure from Ft St John airport (see photo) set 309° on the O.B.S. of YXJ VOR and either YXJ 326 NDB or Blueberry 363 NDB on the ADF as the first 50 NM of this route parallels V-326 and Amber 2 airways. The Railroad proceeds in a NW direction from town along the St John Creek. Gentle rolling hills and extensive farming is done in the area. The railroad, due to its narrow width can be mistaken for section lines at altitude - Watch Carefully. Recommended Minimum VFR Altitude is 3100 ASL to Blueberry NDB.

At approximately 20 NM NW of the VOR, the railroad angles to the left slightly to come within 4 NM of the Alcan highway. A 90° turn, described in the Alcan log as MILE 73, with the access road leading

from the highway is visible from this position. Railroad turns 90° to the East, crosses the Blueberry River, then again proceeds NW along Snider Creek.

Check aircraft position abeam the Blueberry 363 NDB. Beaton River and valley visible to the East and North. Recommended Minimum VFR Altitude rises to 3400 ASL to the Milligan Hills.

50 NM from the Ft St John VOR the R.R. crosses Nig Creek and proceeds in a northerly direction. Entering an area where farming is sparse and mostly wooded areas predominate. Numerous seismic cut-lines in area.

Beaton River R.R. turns to approximately 333°, crosses the Beaton River, then proceeds almost due North. Beaton River airstrip visible from this position.

Abeam the Beaton River airstrip, a position report with "Ft St John FSS" is possible above 5500 ASL. 10 NM North, the terrain rises upon entering the MILLIGAN HILLS Region.

The Milligan Hills R.R. proceeds along the West side of Wendy Lake and between two peaks (Elev. 3006 ASL and 3125 ASL) which form part of the Milligan Hills. Small marshes and lakes are visible in this area. West of Wendy Lake, there is a small gas process plant with seismic lines feeding inward to the clearing, like spokes on a wagon wheel. Wx, if any is encountered, usually forces aircraft to turn around prior to reaching this point.

The Railroad continues Northward, paralleling the West Gutah Creek, towards lower terrain. Recommended VFR Altitude lowers to 3000 ASL (Ft St John altimeter setting).

A significant VFR check-point is the "S" turn where a railroad maintenance facility is positioned adjacent to the railroad line. Cobearon airstrip is located a short distance away, but its use should be restricted to emergencies only as willow growth on the landing surface could damage the aircraft. Contact with "Fort Nelson FSS" should be attempted. Proper NAV frequencies should be selected from here to Fort Nelson airport. The Sikanni Chief River joins the railroad near Nital Creek and parallels the left side of the line for the remaining distance.

Large lakes along the railroad provide good check points with short airstrips located at Nital and Fontas Railroad maintenance camps for emergency use. Airstrips in the northern areas are often shorter and in poorer shape than what may appear from the air. Use these fields as a last resort as many of them are suitable only for tail-dragger type aircraft with big floatation tires. VOR Reception is possible from Fontas and contact with "Fort Nelson FSS" should be made abeam Clarke Lake or the gas process plant.



AIRWAY LOG: Following V-326 or AMBER 2 provides no special problems, provided, one is not forced above an overcast layer. This is most likely to occur around the Sikanni Chief River region where upslope conditions will completely cover the hills. Clear WX at Ft St John and Fort Nelson may not necessarily constitute clear skies throughout. "VFR on Top" is prohibited in Canada and although VDF homing is available at Fort Nelson, it is for emergency use only. IFR Minimum Altitudes are depicted on the chart with VOR reception along the entire V-326 route requiring 7000 ASL or above.

Communications with either Fort Nelson or Ft St John is possible at

6000 ASL or higher. The Beaton River and La Prise Creek airstrips are the only two airfields along the way for emergency use. Major check-points are the Sikanni Chief River Crossing and the Tommy and Klua Lakes, near Mt. Big Foot. Continual relay of aircraft position to FSS is recorded and should you become overdue, a search can be conducted from your last relayed position. Let somebody know where you are at all times and advise if you are encountering some difficulties. Frequencies in use by major IFR aircraft at high altitude are provided on each chart to extend transmission capabilities. Use these frequencies if transmissions on other frequencies fail to get a response. *

FORT NELSON, B.C. - LIARD RIVER, B.C. (Charts #6,7)

HIGHWAY LOG: Tune in VOR and ADF frequencies and establish initial outbound headings prior to departing Fort Nelson airport. Many cut-lines and service roads are located in and around the Fort Nelson area so plan to proceed direct to the town centre to pick up the Alaska Highway. There is less chance of disorientation if departures are executed in this manner. The 300 ft. CN radio communications tower on top of the Poplar Hills and the Muskwa River to the left are good visual check points. The highway passes by the VOR which is situated in a clearing adjacent to the north side of the highway 14 NM from the airport. The new Ft Simpson Highway (presently under construction) begins at Mile 318 and proceeds northbound. The Alaska Highway assumes a westerly and southwest heading, paralleling the Muskwa River and valley for a short distance. Steamboat Mtn. is visible in good weather from this point with terrain beginning to rise more than 1300 ft. within 5 NM to 3325 ASL. If WX in Fort Nelson is reported at 2000 ft overcast, the top of Steamboat would most likely be covered in cloud rendering it impassable (35NM from Ft Nelson airport). WX causing upslope conditions will often cause a flyer to return prior to even reaching this area. Turbulence as a result of the Westerly Winds will rise in intensity from this point until reaching the mountains. Steamboat is identifiable by a small road side auto service centre in a clearing and a CN Tower repeater station. (210° radial Ft. Nelson 112.9 YYE). Due to the winding road, many heading changes will be experienced in the next 20 NM and caution is advised. A heading change to the right of almost 60° true will take you parallel to the Tetsa River, across grass and scrub bush range land to the base of the Rocky Mountain Foothills. (See photo). DO NOT PUSH WX in this area. Wx normally gets worse the further you travel. A position report with Fort Nelson Radio on 126.7 in the Steamboat area is suggested as communications will be lost unless above 6000-7000 ft ASL. An altitude of 10,000 ASL and higher is required to maintain communication with Fort Nelson FSS until in the vicinity of the Liard NDB once in the mountains. At the base of the foothills to Summit Lake (16NM) the terrain rises approximately 1300 ft to Summit Lake (4250 ASL) - the highest point along the entire Alaska Highway. Between the mountain peaks of Mt. St. Paul and Mt. St. George lies Summit Lake (Mile 392). Distinguishing VFR check points are the lodge, the lake and a CN radio communications tower on the south side of the highway, approximately midway up the tree-less slope. (See photo). The highway quickly descends down the SW face of the Stone Range to follow the MacDonald Creek, USE CAUTION - the Churchill Mines Road (Mile 401) has been mistaken for the highway and has lead aircraft into the box canyon at Mt. Roosevelt. The highway crosses the MacDonald River, turns northbound and rounds a near 6000 ft peak where the Racing and MacDonald Rivers meet. Again, USE CAUTION - as another secondary road follows the Racing River up to the Churchill Mines to Mt. Roosevelt. Many heading changes are experienced

along this section and a cross check of the pre-plotted headings on the charts are advisable. Turbulence can be especially bad in this area to as far as the Muncho Valley entrance. Toad River (Mile 422) airstrip can be spotted on the north side of the highway adjacent to a large pasture and small lake (south of the highway), approximately one road mile before the confluence of the highway and Toad River. 80 and 100 octane fuel as well as food and accommodations are available. Toad River (Mile 425) strip is on the north side of the Toad River and because it is situated in a more open field, can be mistaken for the Mile 422 strip. Mile 425 is a short 1500 ft grass strip with departures to the east requiring an immediate right turn to avoid the mountain. Normally, landings are made to the West -- into the prevailing winds. This is a private strip for the experienced short fielder, with no public services offered whatsoever. From Toad River Lodge, the highway follows the Toad River through a very narrow portion of the Sentinal Range before entering the wider Muncho valley. (See photo). Muncho Lake is visible once clear of the last mountain peak. Muncho Lake air strip is located on the south end of Muncho Lake adjacent to the lodge on a creek delta. Its use should be restricted to an emergency only and is not suitable for tricycle geared aircraft. It is used primarily by super cubs and C-185's with large tires which fly out of the area during the summer. A float base adjacent to the J & H Wilderness Resort carries 100 octane and jet fuel. The remaining flight up the valley is straight forward with the exception of a narrowing of the passageway at the extreme north end near where the Trout River enters the Liard valley and empties into the Liard River. (See photo). A position report to "Watson Lake Rdo" on 126.7 and a ADF frequency change to 262 Mhz is suggested at this point. The suspension bridge across the Liard River is visible once clear of the Terminal Range. The 4000 ft Liard River flight strip is maintained on a limited basis and is located 8NM up river from the Liard River NDB. 80 and 100 octane, jet fuel, and public service facilities are available at the Lower Liard River Lodge, 12 road miles to the East (adjacent to bridge). If arrival at Watson Lake with sufficient fuel reserves is questionable, a circling twice over the Lodge and return to the flight strip will alert the owners that a ride is required. 100 octane is approximately \$1.80/gal. and a charge of \$1.00/mile is levied for transportation (24 miles total). Often times during wet periods, the Liard River swells up rendering the airport road impassable. If a fly-by of the air strip gives an indication of poor surface and road conditions, circling the lodge while dipping one's wings will signify that a landing on the highway adjacent to the lodge is required. Road traffic will be halted at the bridge and at about 1 1/2 miles down the highway along the straight stretch. Consider your time and fuel enroute carefully to avoid unnecessary cost and delays - but remember, the above method is far cheaper than a full scale military search for an overdue aircraft.

Selecting the Nelson River and Liard River route to Watson Lake is preferred if signs of excessive turbulence or any measure of weather could preclude safe passage through the Summit Lake and Muncho Lake regions. Several factors make this route more favourable even when the weather and winds are not in question along the highway route. Consider the following advantages:

- 1) Lower terrain features and constant visual contact with the river preclude most orientation problems which might result in one flying into a "box canyon".
- 2) The lowlands route presents less severe turbulence.
- 3) The route, depending on how many corners can be cut, is slightly shorter.
- 4) In poor weather more aircraft file IFR flight plans along Amber 2 and V-326 airways to reach their destination. The proximity of the airways to the general direction of the river route together with the absence of large mountain ranges can prove beneficial in an emergency. Should your aircraft be forced down, your chances of reaching high altitude aircraft with your distress call is far greater than if you were forced down in a mountainous area.

In spite of the good points just described, the route has a few draw-backs:

- 1) No other airports are located along the entire route except those at Liard River and Fort Nelson. If a forced landing is required, alighting on one of the many sand bars along the river bed may be necessary.
- 2) The area is heavily wooded with very little human activity.
- 3) The westerly winds, which generally flow from the southwest, are directed down the Liard River valley from as far up as Watson Lake. This funneling effect, caused by the position of the Sentinal, Muskwa and Barricade Ranges, results in headwinds of a greater velocity than is recorded in the Upper Winds forecasts at Ft Nelson and Watson Lake.

This phenomenon has caught many an unwary pilot in past years and the remains of aircraft that have run short of fuel can sometimes be spotted in the bush a short distance from Watson Lake. (See Fort Nelson to Liard River via Highway Log for information on fuel at Liard River).

- 4) The low lying areas are subject to morning fog which may delay departures until mid-morning.

RIVER LOG: With the above facts taken into consideration, your flight to your next major stop of Watson Lake, could be made much more safely. Briefly then, there are a number of ways to arrive at the Liard River NDB.

Before departure on any of these routes, study the departure headings to follow, and stick with them. With a magnetic variation of more than 30° East, many flyers do not believe their compasses. Pay strictest attention to detail provided on the Alaska Highway VFR navigation chart, as your skill in map reading will give you the perspective needed in this unfamiliar territory. Except for the actual river route itself, slight variations of direct routings and short-cuts to pre-planned points are possible. If the weather is good, by far the shortest route is along V-326 or Amber 2 airways. Minimum enroute altitudes for IFR aircraft along Amber 2 is 6700 ASL and for V-326 it is 11,000 ASL. The heading 264° can seem unusual to some as it appears the general direction of flight is more Northwest. Again believe what your instruments tell you and cross-check with the charts. Major check points along the airway are: the Ft. Nelson River to the north, the crossing of the Dunedin River, Irene Lake, and the elongated ridge prior to reaching the Toad River and Liard River Junction. Reception with Ft. Nelson Radio on 126.7 at 8000 ASL or higher is possible and a position report is recommended at the Toad/Liard Junction. At low altitude, Watson Lake can be reached via the Remote Communications Outlet at Liard River on 126.7. Other routes include:

- 1) Fort Nelson River itself to Nelson Forks.
- 2) flying direct to the VOR thence along the 286° radial to Nelson Forks, and
- 3) a departure over town to pick up the Alaska Highway until Mile 318 (Ft. Simpson Highway), direct to the river, then west to Nelson Forks. A hovercraft used to transport goods across this section of the river is expected to be in operation for summer of 1979.

The route selected will be determined by weather along the airways and your fuel reserves to enable reaching Watson Lake. COM and NAV reception along the above VFR routes is limited. The Poplar Hills block-out almost the entire West quadrant at low altitude.

The Fort Nelson River empties into the Liard River at Nelson Forks. Note the heading change here. The foothills begin their rise to above 3500 ASL around the Beaver River area, followed by a narrowing of the Liard River valley to as far as Rapids of the Drowned at hill crest elevations 2375 and 2413. Mud slides and cliffs along side the river are noted to as far as Hell Gate. If weather is encountered on the flight to the Liard NDB it will usually be between Beaver River and Hell Gate. VFR check points are: the Toad River, the Hell Gate - distinguished by the mound protruding out of the middle of the river, the series of small lakes north of the Grand Canyon of the Liard and the suspension bridge which crosses the Liard River near the Hot Springs and Lower Liard River Lodge.

GROUND-AIR EMERGENCY CODE

INSTRUCTIONS

1. These signals are intended to enable the crew of a force-landed or crashed aircraft, and lost personnel to indicate their condition and immediate requirements to a searching aircraft.
2. Lay out these symbols by using strips of fabric, pieces of wood, stones or any other available material.
3. Endeavour to provide as big a colour contrast as possible between the material used for the symbols and the background against which the symbols are exposed.

4. Symbols should be at least 8 ft. in length or longer, if possible. Care should be taken to lay out symbols exactly as depicted to avoid confusion with other symbols.
5. In addition to using these symbols, every effort should be made to attract attention by means of radio, flares, smoke or other available means.
6. A space of 10 ft. should separate the elements of symbols 2,7,10,14 and 17, wherever possible.

(1) Require Doctor – Serious Injuries	I
(2) Require Medical Supplies	II
(3) Unable to Proceed	X
(4) Require Food and Water	F
(5) Require Firearms and Ammunition	≡
(6) Require Map and Compass	□
(7) Require Signal Lamp with Battery and Radio	!
(8) Indicate Direction to Proceed	↗
(9) Am Proceeding in this Direction	↖

(10) Will Attempt Take Off	▷
(11) Aircraft Seriously Damaged	□
(12) Probably Safe to Land Here	△
(13) Require Fuel and Oil	L
(14) All Well	LL
(15) No	N
(16) Yes	Y
(17) Not Understood	JL
(18) Require Engineer	W

LIARD RIVER, B.C. - WATSON LAKE, YK. (Chart #8)

LOG: The town of Liard River approximates the mid-way point between the two important centers of Ft. Nelson and Watson Lake. With Ft. Nelson lying East of the Rocky Mountains and Watson Lake lying to the West, weather patterns, winds and local disturbances in this sub-arctic climate can change a good situation into a bad one and vice-versa in a matter of hours. Flyers departing with good flight conditions from Ft Nelson or Watson Lake, through this corridor, may find that unexpected headwinds, or deteriorating weather could jeopardize the safety and completion of the remaining flight -- as is often the case.

Liard Rivers' important strategic location as an emergency airport and the aid of the Remote Communications Outlet (RCO) becomes important at a time when enroute decisions may have to be made on whether to proceed, maintain or retreat from your present position. The RCO at Liard is watched by "Watson Lake FSS" personnel on 126.7 and can provide you with the up-to-date on changing weather, traffic-advisories and pilot reports from aircraft who may have just flown through your intended area of operations. Whether you are flying up or down the highway, consider that any miscalculations on ETA's, WX, winds, fuel or remaining hours of daylight etc., may force you to alter your flight plan. Failing to reach your intended destination (Watson Lake if proceeding up the valley, or Fort Nelson if proceeding down from Watson Lake) could conceivably add several hours of unnecessary flying time to reach an alternate airport. This of course will depend on your fuel tank capacity.

When flying up the highway, this leg from Liard to Watson is one of the most important, as the "point of no return" from Ft Nelson is for keeps. Failure to reach Watson Lake leaves most aircraft with insufficient fuel to reach alternative landing strips. Note that with the highway following the Liard River all the way to Watson Lake, the Liard NDB should be tuned in on the ADF to provide back-bearing for the first 30 NM. If the airways are taken, Minimum Enroute IFR Altitude for Amber 2 is 6700 ASL and V-326 is 11,000 ASL for maximum reception and 7000 ASL for obstacle clearance. Liard River airport is 8 NM West of the beacon between the highway and river. In low overcast conditions, use caution in the vicinity of the airport as the highway traffic can penetrate the circuit height.

The ridge that eventually forms Mt. Reid (4075 ASL) due north of Fisherman and Grant Lake seems to generate higher than normal turbulence as the westerly winds cross at right angles. The highway

follows the Liard River to Watson Lake with the first check point being the Smith River bridge, at an access road which leads to an abandoned strip 20 NM up-valley. Communication at low altitude is still possible with Watson Lake FSS to about 10 NM West of the Liard River air strip. The Coal River empties into the Liard River at Whirlpool Canyon with the town of Coal River servicing two lumber mills to the immediate West. Note the smoke for direction and velocity during the operational season. The Rabbit and Ketchika River join at Skooks Landing prior to a significant heading change to the North. (See photo). The area beyond takes one into an area with numerous hills for the next 20 NM.

North of the highway, approximately 7-8 NM from Fireside, a large forest fire burn-out area and numerous small lakes and seismic cut-lines are the most prominent VFR check points. In the Hillgren Lakes area and beyond towards Barney Lake (see photo), the terrain becomes more flatter as the Eastern Rocky Mountain Range is cleared and a central plateau area is reached. USE CAUTION: Many heading changes are experienced while following the highway from here to Watson Lake.

Flight altitudes in excess of 5500 ft. in this area often afford VOR and NDB reception from the Hillgren Lakes area. It is here that a departure from the Highway direct to the airport via the airways is usually attempted. In this remaining 45 NM, there are many bends in the river, the road is winding and many small lakes and marshes cover the landscape. Be it for reasons of low fuel, or to save 5 minutes of flight time, the fact remains that every year, numerous aircraft have become disorientated in their attempts to cut corners. If low fuel is a factor, it is far better to do a precautionary landing on the highway with power, than to leave the safety of the highway and have the possibility of landing with a dead engine in dense bush.

Unless your map reading skills are above average and weather is excellent, stay with the highway as flight planned. Watson Lake is located approximately 4 NM NW of the town and is approximately four miles long and 1½ miles wide and is visible from a great distance. The airport is located on the north shore of the lake. Contact "Watson Lake FSS" on 126.7 at Lower Post (see photo) and again when over the town of Watson Lake. Use the services of the "VDF Steer" if distance and bearing are required or you are in doubt as to your position.



SURVIVAL KIT

1. The following is a list of recommended items in order of priority:

- (a) Emergency locator transmitter.
- (b) Matches in waterproof container and extra ones in your flying jacket.
- (c) Shelter - can be made from ordinary polyethylene sheeting.
- (d) Sleeping bags or blankets. Warm, sturdy clothing, including footwear, gloves and outer wear. Remember that even in summer, temperatures in Yukon mountains can drop below zero.
- (e) First aid kit - best quality and a publication on first aid.
- (f) Food - do not concentrate on hardtack. Survivors of aircraft accidents often have jaw injuries.
- (g) A sharp knife and axe.
- (h) Cooking utensils and mess kit.
- (i) Signalling devices - mirror, flashlight, flares, strobe light. It may be possible to remove the aircraft landing light and connect it directly to the battery.
- (j) Mosquito head nets.
- (k) Fishing and hunting equipment - fishing line, trawls, hooks, sinkers (2" mesh or less).
- (l) Snare wire - guns (optional - check Provincial and Territorial laws).
- (m) Portable compass - or use aircraft's if possible.

- (n) Sewing kit.
- (o) A copy of a good survival book.

2. A careful inventory of the aircraft wreckage should be made for all useful items.

- (a) Fuel for starting fires.
- (b) Oil - to provide black smoke for signal fires.
- (c) Panels - containers, heat reflectors or signalling devices.
- (d) Cushions - insulation for under sleeping bags. Covers convert to packsacks.
- (e) Fabric - ground sheets, sleeping bag covers, signal strips, fuel.
- (f) Wiring - cord for constructing lean-to, making snow shoes, etc.

1. File a Flight Plan - Always.
2. Take a Survival Kit.
3. What to do in case of forced landing:

- (a) Stay put.
- (b) Study surroundings.
- (c) Build 3 signal fires. Three fires is the recognized international distress code.
- (d) Build a campfire and shelter.
- (e) Take stock. Put all items to use.
- (f) Ration food and water.

WATSON LAKE, YK. - TESLIN - WHITEHORSE, YK. (Charts #9,10)

LOG: Continuing from Watson Lake to Teslin and on to Whitehorse, several important considerations must be taken into account.

First, Watson Lake is situated in a large, relatively flat area surrounded by mountain ranges in the distance. The many rivers, marshes, small lakes and mountain peaks call for attentive and careful navigation. Common navigation errors are: joining the Robert Campbell Hwy northbound which eventually leads to Ross River, and turning down the Cassiar Hwy southbound which leads to Dease Lake. Use the service of the "VDF Steer" from FSS along with the VOR, ADF and thorough map reading once airborne to avoid any problems if in doubt.

Secondly, Watson Lake and Whitehorse airports are basically the same elevation, with Pine Lake higher by over 1250 ft. Local flyers have found that if either Watson, Teslin or Whitehorse is covered by low overcast, the Rancheria/Swift River area is usually impassable and the Squanga Lake area is questionable for safe passage. Weather is available from Teslin and also from the Swift River maintenance camp. Swift River broadcasts three times daily (twice in winter) and is available through the Whitehorse, Watson Lake and Fort Nelson teletype circuits.

Thirdly, the mileage by highway is 224NM, 196NM via Amber 2 and 200NM via V-326. The terrain along Amber 2 and V-326 from Watson to Whitehorse is extremely rugged. Adverse atmospheric conditions and mountains may interfere with nav-aid signals. By staying with the highway, the less rugged terrain offers you an added safety factor in the event of an emergency.

To position on the Alaska Highway from the airport, proceed directly to the VOR which is adjacent to the north side of the highway or fly directly over the town centre. (See photo). Turning to the southwest the highway crosses over the Liard River for the last time, and continues to the West across the lowlands to the Cassiar Mountains. Contact "Watson FSS" at Upper Liard Village when clearing the area. The Cassiar Highway junction at Mile 649 and the Dodo Lakes are good VFR check points.

During the summer, dust trails caused by vehicle traffic can be seen for many miles. The 250° radial crosses over the 350 ft. CN Tower situated at the Rancheria Valley entrance, at the base of the 5000 ft. peaks of the Cassiar Range. Contact with "Watson Lake FSS" on 126.7 is possible above 4000 ASL and a progress report here is suggested.

The highway remains to the north of the Rancheria and Swift Rivers West to as far as Teslin Lake. The valley is narrow to as far as Swan Lake with moderate to severe turbulence to be expected in light winds. Near Shisky Lake, on the south side of the highway, a forest fire burnout area serves as a good check point. The tree line barely reaches half-way up the near 7000 ft mountain peaks, a familiar sight in most of the Yukon.

The Pine Lake airstrip is located south of Daughney Lake, a few miles from the Upper Rancheria Bridge. Limited accommodation is available at the Bears Paw Lodge (adjacent to the bridge) or at Swift River if re-

quired. The valley widens a little in this region and narrows again when nearing Swift River. Radio station CBDB on 970 Mhz, is available for cross checks for ADF equipped aircraft. (See photo). Watch carefully and believe your compass heading of 170° magnetic in this valley segment between Swift River and Swan Lake. One can get slightly disoriented, when the intent is to fly UP the Alaska Highway. NOTE: This Region is further West than most new flyers in the area might have imagined. Pine Lake for instance is further West than Vancouver, B.C. by longitudinal comparison.

The valley widens at Swan Lake (see photo) with the crossing of the Smart River marking the halfway point between Dawson Creek and Fairbanks. From here the highway swings northward alongside the Helen and Morley Lakes with Teslin Lake visible in the distance. (See photo). Establish contact with "Teslin Rdo" within 20 NM and advise if fuel is required. FSS operator is on duty from 16-04Z daily but the refueller does not regularly attend the pumps. Teslin has a low power output transmitter and its limited range barely includes Morley Lake and Johnson Crossing. A low stratus layer or fog may form over Teslin Lake when cooler winds pick up moisture from the open waters. This is especially prevalent during the fall and winter periods. Following the shoreline of Teslin Lake the highway crosses the Teslin River bridge at the extreme West end (Johnson Crossing). The Canol Highway joins the Alaska Highway from the north. Do not mistake this road for the Alaska Highway which circles by the Little Teslin Lake and parallels the Squanga Lake airport. (See photo). Keep alert for other aircraft as VFR highway traffic passes directly through the arrival and departure paths of the runway. Turn on your landing lights for safety. With a compass heading of approximately 205°, the highway continues through the narrow valley to Jakes Corner at the junction of the Atlin and Tagish/Carcross Highways. Prevailing winds in the Whitehorse area are generally from the south, but winds spilling across the mountain barriers in the Bennett, Tagish and Atlin Lakes area assume valley directions. A funnelling effect is common in the area at lower altitudes (to 1000 ft. above peaks) with moderate to severe turbulence to be expected. Resuming a northwesterly heading (290°) along Marsh Lake, a progress report with "Whitehorse FSS" is suggested at the north end of the Lake. The highway becomes paved from this point to Whitehorse.

Reception is possible at lower altitudes with Whitehorse VOR, but use with reservation as ore deposits and mining in the area will cause skip and bouncing conditions. Higher altitude aircraft can use the Robinson 335 NDB, or home in on the Whitehorse 302 NDB. Contact Whitehorse Tower (118.3) over the McClintock bridge (abeam power dam). (See photo).

VDF Steers are available during Whitehorse Tower hours of operation and are often used for aircraft who are caught above an overcast cloud layer and require "let-down" assistance. Considerable altitude is necessary for reception due to 7000 ft. peaks in this area. VDF Steers for low altitude aircraft inbound to Whitehorse along the highway is limited to approximately 15 miles to the south (Marsh Lake) and 7-10 miles to the north (Laberge Lake). *

MAJOR DIFFERENCES CANADA - USA PROCEDURES

1. "VFR on Top" flight is not permitted under the visual flight rules in Canada.
2. All flights cruise at even or odd thousand foot level. Even thousands plus 500 feet or odd thousands plus 500 feet cruising altitudes are not used in Canada under VFR rules.
3. Only IFR and "Controlled VFR" flights are permitted in the Block Airspace. The Block Airspace can be described as all on designated low level airways above 12,500 ASL West of the 114° West longitude and 9500 ASL East of the 114° West longitude to 18,000 ASL. (A line which lies approximately between Calgary and Edmonton, Alberta see FLIGHT PLANNING 1.)

WHITEHORSE - BURWASH, YK. - NORTHWAY, AK. (Charts #11,12)

Whitehorse serves as the epicentre of most flights in and out of the Central Yukon. Routes which radiate from the capital include:

- 1) Whitehorse via highway to Northway, Alaska
- 2) Whitehorse to Teslin and Watson Lake on the highway
- 3) Whitehorse to Juneau via the R.R. to White Pass and Skagway
- 4) Whitehorse to Atlin via Dease Lake and Cassiar Hwy
- 5) Whitehorse to Carmacks and Dawson City via Klondike Hwy

Whitehorse weather office provides coverage of station reports and weather systems for the entire area and a stop here is first and of foremost importance. A full briefing service is available during normal working hours. Whitehorse FSS can offer many suggestions for go and no-go situations along these major arteries. NOTAM for selected U.S. border stations are posted, and should be checked.

The route from Whitehorse to Northway, Alaska follows the north side of the St. Elias Mountains and the Alaska Range. Peaks along this section rise to 20,000 ASL (Mt. Logan). The valley is wide and there are numerous check points to aid in confirming position. Northway is the first port-of-entry with services that include weather and flight plan stations, fuel, food and accommodations and Customs. Custom officials prefer a phone call (in addition to ADCUS) to ensure proper information is received. Normal working hours are 8 a.m. - 5 p.m. local with extended hours during summer months. Customs is located on the airport ramp (north side). Acquiring fuel along this portion of the route is difficult. Local pilots and operators at Haines Junction, Kluane/Silver City, Burwash, White River and Beaver Creek have private fuel caches in drums. As the supplies are limited, prior arrangements by telephone is advisable to avoid unnecessary costs and long delays. Make allowances for an additional two hours delay on your flight plan if fuel reserves do not allow for a direct flight from Whitehorse to Northway.

LOG: When clear of the Whitehorse Control Zone, contact "Whitehorse FSS" on 126.7 to ensure flight plan is open. Takhini is the normal call-up point. (The Whitehorse 302 NDB should be monitored). The Alaska Highway paralleling the west side of the city passes by Porter Creek, to the junction of the Mayo Highway. Cousins/Whitehorse airstrip is located on the north side of this junction. NOTE: Whitehorse/Cousins is lower in elevation than Whitehorse Airport and during periods of below "SPECIAL VFR" this strip is usually open. (See photo). USE CAUTION as VFR highway traffic passes thru approach and departure paths.

From the junction to Takhina the area is sparsely wooded with a forest fire years ago being evident to as far as the Hot Springs area. Haeckel Hill features a newly constructed ski resort. A powerline

parallels the unpaved highway to as far as Burwash. A CN Tower at Champagne and the Dezadeash River are good check-points. (See photo). CAUTION: The secondary road leading to Aishikik can be mistaken for the main highway due to valley and check-point similarities. The power line, road and river along the Aishikik valley appear the same as that of the Alaska Highway, the Dezadeash River and the power line following the Dezadeash valley. Watch Headings Carefully. Nearing Haines Junction, Pine Lake and Pon Mountain can be used to mark the location of the Haines Junction airport. The CBDF 860 radio station at Haines Junction aids as a radio cross-check. CAUTION: The Haines Road has been mistakenly followed by many pilots on their return flight from Alaska. Check Headings Carefully. From Haines Junction to Kluane/Silver City the valley floor rises over 1000 ft. to 3204 ASL at Bear Creek and the Boutilier Summit (3280 ASL) is the highest point between Whitehorse and Fairbanks. The highway continues past the south end of Kloo Lake. NOTE: Turbulence and local weather disturbances often form in this area as cool winds descend from the Kaskawalsh Glacier and across Kluane Lake. Low stratus layers or fog banks at the South-east end off the lake indicate an upslope condition in the valley along the Kluane Hills. Ice in Kluane Lake usually breaks up in the middle of June. A progress report with "Burwash FSS" on 126.7 is possible above 4500 ASL. Radio station CBDL 940 and Burwash NDB 341 may be received at low altitude. Pass position report to Burwash FSS in area and check advisories for local traffic arriving and departing the airport. Flight from Burwash to Pickhandle Lake, White River up thru to Dry Creek and Beaver Creek is straight forward. (See photos). Weather moving in from the NW may plug up the Shakwak Trench beginning at the Macauley Ridge. Contacting MILE 1167 Lodge by phone to obtain a local observation is possible. Radio station CBDM 690 is an excellent check point for the Beaver Creek area. The valley narrows to approximately 7 NM across and enters a rolling hills region for the next 40 NM. Nearing the Canada/U.S. Border, the highway is winding and compass headings may seem extremely unusual by Southern standards. A narrow cut-line clearing marks the 700 mile Canada/U.S. border along the 141 ° longitude. This tree swath can be seen for miles from various angles in the air. USE CAUTION: Many side line roads in this low hilly area. Upon crossing the border the paved Alaska Highway enters the interior plateau of Alaska which extends from the Nutzotin, Wrangell and Alaska Ranges to the Brooks Range, beyond the Yukon River. Elevation gradually drops as the highway descends for nearly 300 miles along the broad valley of the Tanana River to Fairbanks. Reception with "Northway FSS" on 123.6 is possible at the border above 3000 ASL. Numerous small lakes, streams and marshes make Northway airport very difficult to find when map reading. VOR, NDB and VDF Steer facilities available at Northway airport. Call 30 NM out and advise position and intent.



NORTHWAY, AK. - BIG DELTA, AK. - FAIRBANKS, AK. (Charts #13,14)

Northway is located approximately half-way between Whitehorse and Fairbanks. The gateway to the last Alaskan Frontiers, Northway provides services that include a complete 24-hour flight service station, accommodations, food and Customs. Charts are available for the State of Alaska if not previously purchased. 80, 100 fuel is available here as well as at Tok and Tanacross. No fuel is available at Big Delta. Terrain rises to 3600 ASL along the north side of the highway and to 7000 ASL on the south side. The Tanana River flows through the valley to empty into the Delta River near Big Delta. Piloting through this last leg presents no special problems and VFR check points are more numerous and communications is good. Weather not shown on station reports for Northway and Big Delta could be expected in the Lake George area where the mountains to the south and the hills to the north coincide. (See photo).

LOG: Around the Northway airport numerous ponds in the local area may cause some confusion. Fly directly to the foothills to pick up paved highway. Listen carefully to traffic advisories in the area and call when clear of the area. (USE of landing light is advisable during peak periods). Radio reception at low level along the entire route is possible due to the relatively flat terrain and the placement of remote communications outlets at Knob Ridge. (Northway FSS on 122.2) and Tok (Northway on 122.2) Pilot reports if unexpected weather or turbulent conditions are encountered prove helpful for others planning flights along the same route. CAUTION: Watch for five towers to 700 ft. AGL located on north side of highway between the Tanana River Bridge and Tok Junction. Guy wires extend to midway between the two clusters and road. Although lighted with flashing strobes, they can be extremely hazardous in periods of reduced visibility. At George Lake, the highway crosses in a straight line over the flats to Big Delta a distance of approximately 30 NM. (See photo). Contact Big Delta FSS

approximately 25 NM out for traffic advisories. Big Delta (Allen Airforce Base) is primarily a military airport but a full time FSS is located on the north side of Rwy 06. Hours of operation are from 10-0730Z (DT 15-06:30Z)dly. Other times contact "Fairbanks FSS". Fuel is available only to the local pilots and transportation to lodging in town is virtually non-existent. The now famous Alaska Highway pipeline from Prudoe Bay to Valdez lies in a NW-SW direction adjacent to the airport and town. A portion of the pipeline can be seen in suspension across the Tanana River near the junction of the Big Delta River. The Delta River parallels the highway for the remaining 80 NM to Fairbanks. Turbulence and upslope conditions may cause weather to obscure the highway near the Richardson and Harding Lake areas. Use the Eielson and Fairbanks VOR's and Chena 257 NDB to obtain radio cross-checks. Prior permission for passage thru Eielson AFB available on approach control 118.1 or Twr 126.2. Fairbanks approach control on 118.1 and Atis 124.4 should be tuned in. Secondary radar for transponder equipped aircraft is possible in the Fairbanks Terminal area and its use is strongly suggested. Plant features of the surrounding area and the city blend in remarkably well especially when snow is on the ground. The Wainwright AFB and Metro Field are often mistaken for the Fairbanks Int'l Airport. High traffic area- Recommend the use of landing lights to enhance safety Fairbanks Int'l has two runways - 10,300 ft. (Rwy 01L-19R) for larger aircraft and 3200 ft. (Rwy 01R-19L) for general aviation aircraft. Expect to land on either. All services for private aircraft are located on the south side with parking available across from the FSS building. Brochures, pamphlets, charts and good sound advice is available from FSS personnel for those destined to other parts of Alaska or for your return trip to Canada.



RETURN FLIGHT TO CANADA

As mentioned in the Flight Logs for travelling up the highway, the following points should be considered for a return flight:

- 1) Time Zones in Alaska and the Yukon differ and should be taken into account when services are required. Departures in daylight may result in night flight in the mountains. Check carefully.
- 2) Customs clearance is available at Beaver Creek, Yukon and a phone call should be placed to the authorities so arrangements can be made to meet you at the airstrip (approx 1NM north of town). No ADCUS is available and a \$30.00 call-out fee is to be expected. Aircraft with sufficient fuel usually flight plan for Northway to Whitehorse as Customs are available on a regular basis. Customs at Haines Junction - emergency only thru the Royal Canadian Mounted Police.
- 3) Fueling at Northway is standard procedure as fuel availability at Beaver Creek, Burwash, Kluane/Silver City and Haines Junction is questionable.

- 4) "VFR on Top" is not permitted in Canada. Many aircraft in recent years have become lost above a cloud layer by relying upon radio aids which could not be received at necessary flight altitudes. VDF Steers are available at Whitehorse should you find yourself in this situation.
- 5) Errors in navigation can be made in the Haines Junction area as a result of coming down the Haines Road. Use the radio station CBDF 860 and Pine Lake for guidance. Check headings on charts.
- 6) Check weather thoroughly, headings accurately and charts and assure that navigation aids are in order. Both Northway and Fairbanks display Class I NOTAMS of Canadian airports and these should be consulted.
- 7) File a flight plan along your entire route and advise of any diversion, delays, or changes as soon as possible.
- 8) Establish contact with "FSS" as soon as possible and advise position continuously along your route. Searching for one overdue aircraft which was last reported 30 NM out is a lot less troublesome than searching a 200 NM section of barren lands!



ADDITIONAL CHANGES

Aircraft fitted with transponders, which intend to fly within 25-50NM of the Grande Prairie, Alta., Peace River, Alta., Dawson Creek, B.C. and Ft. St. John, B.C. airports are advised that "SSR Radar" capability is available. Through the services of the Beaverlodge Radar installation (approx. 15NM West of the Grande Prairie airport), traffic advisories may be obtained through the Edmonton Control Centre (traffic permitting). Pilots will normally squawk 1200 with Mode C — altitude reporting possible. The Radars' return to operation was spurred by the numerous aircraft which fly in this area who are directly associated with oil & gas exploration.

KEEP ALERT, WATCH FOR OTHER AIRCRAFT.

FALHER MUNI, ALBERTA — Airport closed — Use Donnelly airport.

FT. NELSON, B.C. — **TWR:** 118.7 **GND:** 121.9
Twr hours of ops 14-04Z (13-03Z DT) 15th May to 31st Oct, 1981.

NOTE: Twr is only temporary and should a transmission on the Twr freq. produce no response, ctc Ft. Nelson FSS on 126.7 initially and on 122.2 when 15NM for pertinent traffic advisories. Rwy 07-25 closed from July 6th to August 23rd for repairs.

No coffee shop or snack bar operating at the airport. Taxi fees to town approx. \$8.00 (one way).

FT. ST. JOHN, B.C. — Cecil Lake NDB "BI" Freq. 376 name will be changed to "CARSON" (effective 6th of August, 1981).

NORTHWAY, ALASKA — NDB Frequency is now 390.

SQUANGA LAKE, YUKON — No restaurant facilities available, unless staying at the Lodge.

TESLIN, YUKON — Right-hand circuits in effect for Rwy 08.

WATSON LAKE, YUKON — No fuel available after 1800 local time. Taxi to town is \$12.00 in lieu of the \$8.00 listed. New hotel is the Gateway Motor Inn. Call (403) 536-7744 for reservations.

WHITECOURT, ALBERTA — NDB "FH" Freq. 304 renamed McLeod NDB and coordinates redefined to 50° 08N, 115° 47W.

MANDATORY FREQUENCIES

Transport Canada has designated a mandatory frequency (MF) at selected aerodromes. This frequency shall be used by all radio equipped aircraft on the ground, arriving or departing, and within a specified distance (normally 20NM) of the aerodrome. Where applicable, this will be the frequency of the air/ground facility providing advisory service for the aerodrome.

All pilots, for which there has been a MF established, will be required to transmit certain position reports on the MF. These reports have two formats, either a direct transmission, made to the ground station; or a broadcast (transmission) which is made to advise all concerned of the pilots intention. Where a ground station exists, example — Twr, FSS, etc., the initial transmissions shall be directed to the station. Where no ground station exists, all reports shall be broadcast blind. The following MF's are applicable to the Alaska Highway Route.

DAWSON CREEK: MF 122.2 within 15NM. O/T on 126.7 (to Ft. St. John FSS).

FT. ST. JOHN: MF 118.5 within 20NM. O/T on 126.7 (to FSS).

FT. NELSON: MF 122.2 within 15NM. O/T on 126.7 (to FSS).

NOTE: During Twr hours of ops., use 126.7 within 30NM and Twr on 118.7 within 15NM (PCZ to 5NM radius).

WATSON LAKE: MF 122.3 within 20NM. O/T on 126.7 to FSS.

TESLIN: MF 122.2 within 20NM (to FSS). O/T on 126.7.

WHITEHORSE: MF 118.3 within 20NM. O/T on 126.7 (to FSS).

BURWASH: MF 122.2 within 20NM (to FSS). O/T on 126.7

For additional changes on each individual airport, refer to ON TRACK . . . the Pilot's Air Travel Guide Revisions #104.

RADAR ASSISTANCE FOR VFR AIRCRAFT

Prior to March 16th, 1981 Radar Assistance for VFR aircraft travelling the Alaska Highway was only available when approaching within 40NM of the Fairbanks, Alaska airport. Now limited assistance can be provided in the west central portion of Alberta and the north eastern section of British Columbia.

Over the past few years air traffic in the Grande Prairie/Ft. Nelson/Peace River area, known as the "Oil Patch" has increased at an alarming rate. This increase in aircraft volume taxed air traffic services in the area to its limit.

Air traffic control was being provided by the Edmonton Area Control Centre utilizing Procedural Standards (non-radar) which resulted in excessive delays to its users, complex control clearances and controller work load reached a critical stage. A system known as Radar Digitized Display 1 (RDD-1) became available and this system has since been commissioned for use by Edmonton Centre through the Beaverlodge, Alberta Radar source.

VFR pilots intending to travel the Alaska Highway should make note of the features this service has to offer them. Particularly as an aid to lost aircraft, or for those requiring additional guidance, when filing IFR or CVFR along the airways. This system does not in any way relieve the VFR pilot of his responsibility to maintain VFR at all times. NOTE: "VFR on Top" is prohibited in Canada.

The following outlines the capability and limitations of this new service.

1. The information displayed at the control sectors in Edmonton is Secondary Surveillance Radar (SSR) only. That is, only aircraft equipped with a functioning transponder will be interrogated and displayed at Edmonton.
2. The system is capable of displaying altitude readout on aircraft equipped with Mode C equipment. The RDD-1 system operates with the altimeter set on standard pressure (29.92) and does not apply a corrective factor to aircraft operating on station pressure.
3. Although aircraft not equipped with a transponder will be given full ATC service, it must be understood that during IFR weather conditions and peak traffic periods these aircraft may experience appreciable delays. The separation standards for Non-Radar control compared to Radar control are much more extensive.
4. The area of radar coverage is approximately a 200NM radius of Beaverlodge. Whether an aircraft is interrogated or not will depend on the aircraft's altitude and distance from the Radar antenna.
5. The separation standard required by ATS using a remoted, digitized Radar source is 10NM between all aircraft operating at the same altitude. In addition to

this standard, controllers have other procedures to maintain, so that, in the event of a Radar or communication failure, Procedural separation can be accomplished with minimum delay.

6. Radar service, because of present limitations, has been divided into Primary and Secondary control service areas:

(a) **Primary Area** — That area bounded by a line joining the tangents of a 50NM radius of the Fort St. John NDB and a 50NM radius of the Grande Prairie NDB.

(b) **Secondary Area** — That area outside the primary area but including all airspace within the sectors concerned within which radar returns can be expected.

7. Full Radar service is provided by the **Primary Area**. This service includes Enroute, Arrivals (Radar vectors to final approach) and Departures. The following limitations are applied:

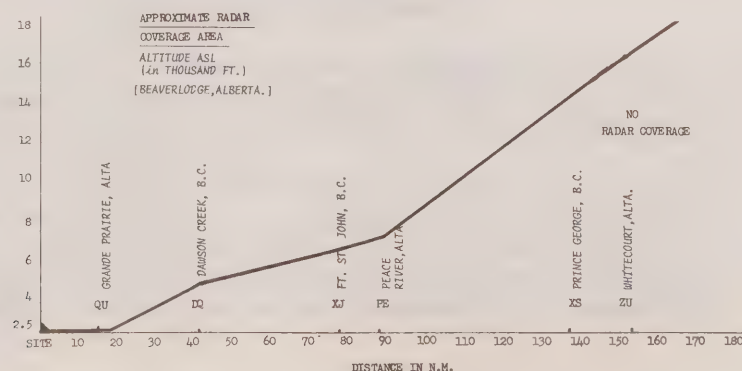
(a) Grande Prairie 25NM Radius — Full Arrival/Departure service with a minimum radar vectoring altitude (MRVA) for arrivals and overflights of 5000 feet (5T) except northwest quad MRVA is 5.2T.

(b) Dawson Creek 20NM Radius — Full Enroute/Arrival service with MRVA of 5T except southwest quad MRVA is 5.3T.

(c) Fort St. John 25NM Radius — Full Enroute/Arrival service with MRVA of 6T south of airport and 8T north of airport.

(d) The remainder of the area has full Enroute service subject to Radar capabilities.

8. Full Enroute Radar service including vectors to Peace River will be provided in the **Secondary Area** subject to controller workload in the Primary Area. Standard Procedural (Non-Radar) separation will otherwise be applied.
9. Control procedures and unit agreements are continually being reviewed and updated to provide the best service possible to the Aviation Industry.
10. Radar service in this area will be expanded, as control staff become qualified, to eventually provide full 24 hour Radar control.
11. It must be understood that this Radar service is subject to unscheduled outages without NOTAM action.
12. Remember if a VFR does not have a transponder we cannot see him — if he does we will pass traffic. In VFR weather the name of the game is "Keep alert, watch for other traffic".



North to Alaska

The Alaska Highway celebrates its 40th birthday this year.

And although four decades have passed since the highway opened the way to northern British Columbia, the Yukon and Alaska, it's still a rugged land inhabited by equally rugged individuals.

The vast territory along the highway is an outdoorsman's wonderland. There's fishing — mountain whitefish, Arctic Grayling, and northern pike. And there's big game hunting — moose, sheep, mountain goats, elk, and caribou.

Streams and mountain ranges are becoming increasingly popular for summer packhorse trips, canoeing, white water kayaking, snowmobiling, cross-country skiing and photographic safaris.

To mark the highway's 40th anniversary, the people of the north have embarked upon an "Alaska Highway Adventure" and are inviting travellers from around the world to join them.

The 20-month celebration officially began at Mile 0 in the town of Dawson Creek, B.C., March 20, and will include dogsled races, snowmobile rallies, international canoeing competitions and a host of other activities.

Every northern community along the Alaska Highway between the Alberta and Yukon borders will be staging major events.

Among the first events was a snowmobile journey on an old pack trail between Dawson Creek and Fort St. John. About 100 riders travelled the route. Plans for a snowmobile marathon between Dawson Creek and Whitehorse, a distance of more than 868 miles, are in the works for 1983.

The Alaska Highway Adventure will focus attention on B.C.'s scenic north and emphasize highway's role in the north's development.

Fears of an invasion by the Japanese military during the Second World War that prompted the American government to propose a link between Alaska and centres to the south. In 1942, a primitive pioneer road was carved through the northern wilderness between Dawson Creek, B.C., and Fairbanks, Alaska, and the following year all 1,511 miles were surfaced with gravel, opening a permanent military supply route to Alaska.

An estimated 25,000 U.S. soldiers, American and Canadian civilians worked for 20 months, blasting the route through B.C.'s Rocky and Cassiar Mountains, into the Yukon and over the Dawson and Nisling Ranges to Alaska.

More than 130 bridges span the canyons and streams of the north, including major waterways such as the Peace, the Liard, and the Yukon Rivers.

With the threat of attack by Japan, the highway was built in a hurry and at tremendous expense. The American government spent nearly \$140 million on labour, accommodation, food, transportation and other costs and Canadian authorities supplied the right of way and waived customs duties on materials

and equipment from the U.S.

After the war the Alaska Highway was opened to the public and became an integral part of Canada's northern system. It has since opened the north for exploration and development of oil, natural gas and coal reserves, other forms of mining, logging and other industries.

Many of the soldiers and civilians who built the Alaska Highway are still alive and reunions of various companies are expected to highlight the 20-month celebration. Already, last year, one company of American engineers involved in the highway construction came together at Dawson Creek for a celebration and expressed their enthusiasm for the Alaska Highway Adventure.

Visitors from other parts of the world will likely come for some of the new events — a vintage car rally at Hudson's Hope, a winter Mardi Gras with dog-sled races and street dances at Dawson Creek, or downhill ski competitions at Azzu Ski Village south of Chetwynd.

One of the most ambitious ideas is a truckers' reunion at Fort Nelson near Mile 300 on the highway. Truckers who have travelled and worked on the Alaska Highway during the past 40 years will be invited and hundreds could show up.

At various times during the 20-month adventure, a flying circus is expected to tour the province's north and a theatre group from Northern Lights College will take a show on the road.

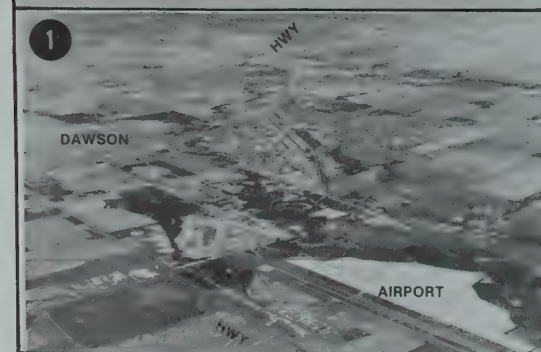
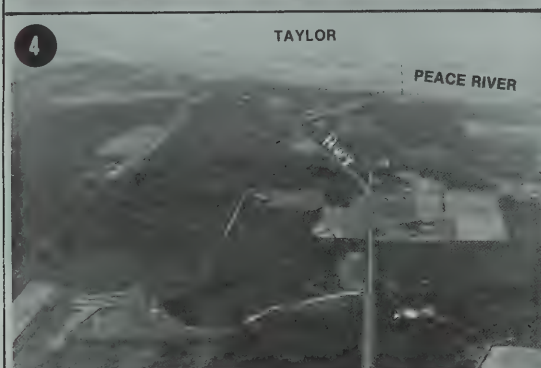
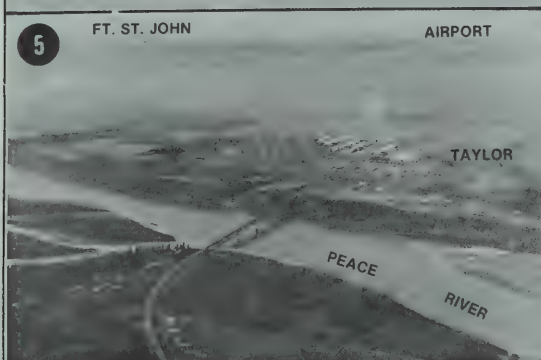
Northern Lights College has also arranged an Alaska Highway Symposium designed to promote interest in the Canadian northwest to be held in Fort St. John, June 19 and 20. Governor-General Ed Shreyer will be the keynote speaker for the symposium evaluating northern opportunities for the next 40 years.

Travellers in B.C.'s north during the Alaska Highway Adventure will be issued passports containing discount coupons for riverboat cruises on the Peace River and tributaries, outdoor safaris and other adventures.

The new town of Tumbler Ridge and other aspects of recent northeast coal development will be of interest to many, and parks such as Stone Mountain, Muncho Lake or Liard Hot Springs make attractive overnight stops for summer campers.

This summer the Alaska Highway Adventure is in full swing and as the 20-month festivities continue dozens of new and unusual events will be held. It's the largest, most ambitious celebration ever held in northern B.C., an appropriate tribute to the workers who brought the rest of the world to the Canadian northwest.

More information on the Alaska Highway Adventure is available from the Peace River Alaska Highway Tourist Association, P.O. Box 6850, Fort St. John, British Columbia, Canada, V1J 4J3, or Tourism British Columbia, 1117 Wharf Street, Victoria, B.C., V8W 2Z2.



**FT. ST. JOHN
COMMUNICATIONS**

TWR: 118.5 within 20NM (FSS when
TWR clsd)
GND: 121.9 (Ops 14-06Z dly)
FSS: 126.7, 122.5, 114.2T, 326T
(Ops 24 hrs)
VDF: 118.5, 121.9, 121.5
(Twr hrs only)
HIGH ALT IFR: 132.6



**DAWSON CREEK
COMMUNICATIONS**

FSS: 122.2 within 15NM, 121.5. Ops
1530-2330Z Mon.-Fri. O/T ctc Ft. St.
John FSS on RCO on 122.2
HIGH ALT IFR: 132.6

MINIMUM ENROUTE VFR ALT.

3200 ASL - Dawson Creek to Ft. St. John

MINIMUM RADIO RECEPTION ALT.

3500 ASL - Dawson Creek to Ft. St. John
(Dawson Creek or Ft. St. John FSS)

MILAGES

VIA HIGHWAY	DAWSON CREEK	FT. ST. JOHN
DAWSON CREEK	0	36
KISKATINAW RIVER	19	17
PEACE RIVER	30	6
FT. ST. JOHN	36	0

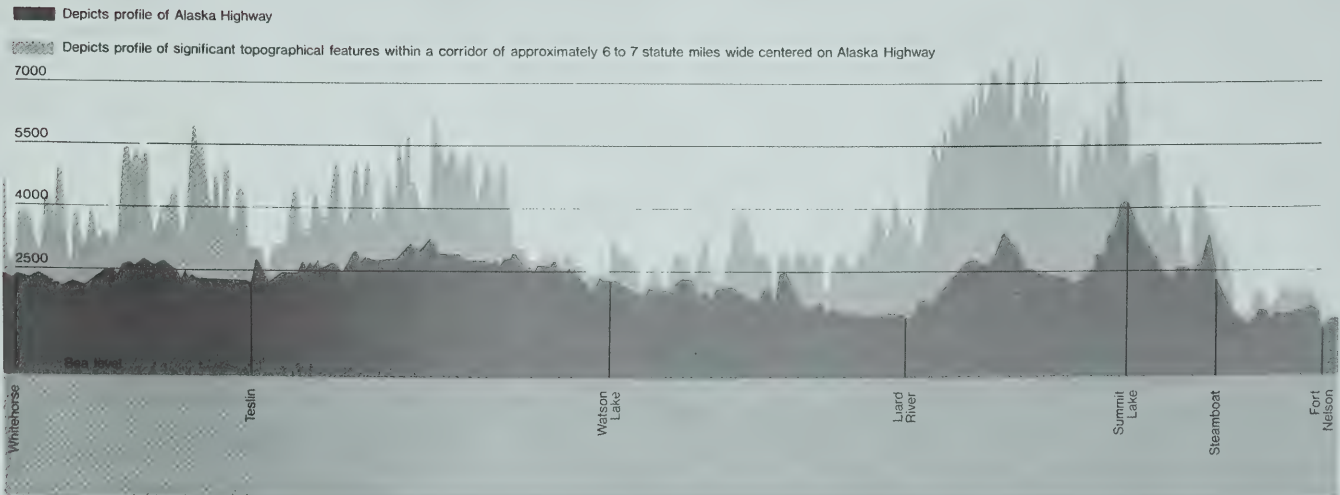
VIA AIRWAY	
DAWSON CREEK NDB to FT. ST. JOHN NDB	42

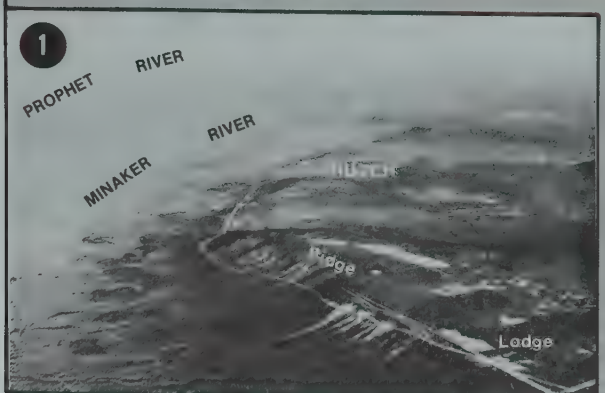
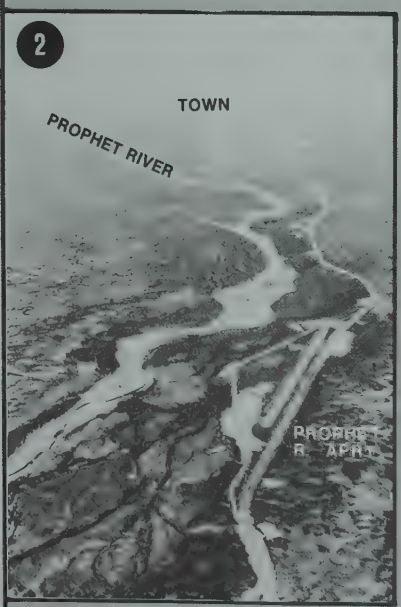
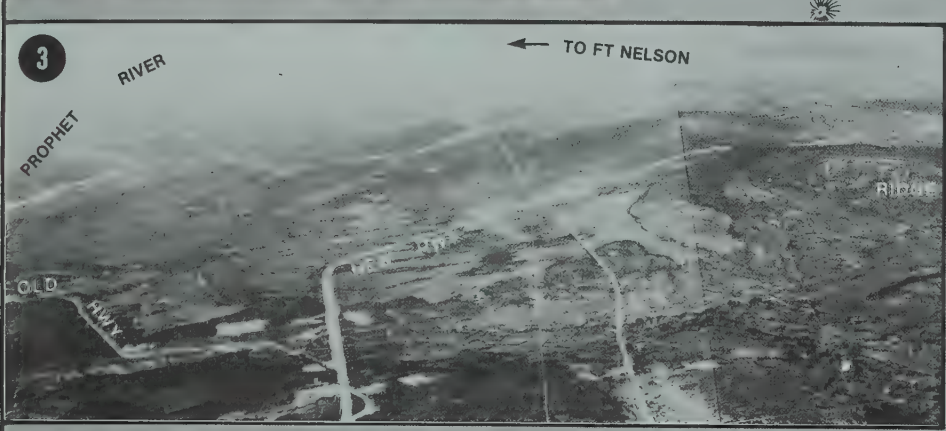
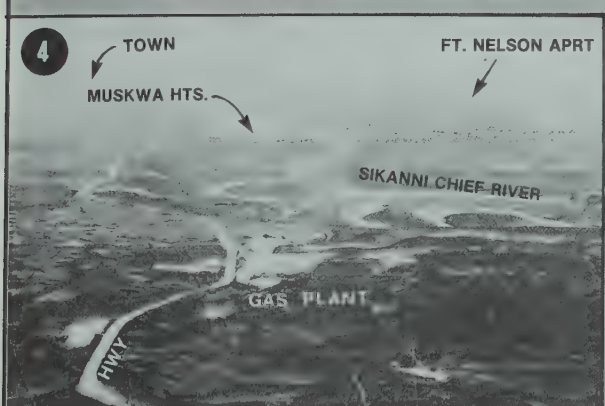
For Reference Use Only
NOT FOR NAVIGATION

ALASKA HIGHWAY - FLIGHT PLANNING
(DAWSON CREEK - FAIRBANKS)



ALASKA HIGHWAY - TERRAIN PROFILE
(FT. NELSON - WHITEHORSE)





VIA HIGHWAY		
	FT. ST. JOHN	FT. NELSON
FT. ST. JOHN APRT	0	204
WONOWON	49	155
MILE 125	70	134
PINK MTN.	83	121
SIKANNI #147	87	117
SIKANNI #164	99	105
MASON CREEK	105	99
BUCKINGHORSE	109	95
TRUTCH MTN	130	74
PROPHET RIVER	146	58
PROPHET RIVER TOWN	154	50
GAS PLANT	192	12
FT. NELSON APRT	204	0

VIA AIRWAY V-326		
	FT. ST. JOHN	FT. NELSON
FT. ST. JOHN	0	176
VOR	6	170
BLUEBERRY 363 NDB	36	140
ABEAM LA PRISE CK	80	96
SIKANNI RIVER	106	70
KLUA LAKES	125	50
JCT MUSKWA/ LOC 110.3 MHZ	166	10
FT. NELSON APRT	176	0

VIA AIRWAY AMBER 2		
	FT. ST. JOHN	FT. NELSON
FT. ST. JOHN	0	171
ST. JOHN 326 NDB	4	167
BLUEBERRY 363 NDB	35	136
SIKANNI RIVER	108	63
KLUA LAKES	124	43
FT. NELSON 382 NDB	167	4
FT. NELSON APRT	171	0

FT. NELSON COMMUNICATIONS

TWR: 118.7 within 15NM (FSS when Twr closed)
GND: 121.9 Ops 14-04Z (DT 13-03Z)
May 15th - Oct. 31st
FSS: 126.7, 122.2, 121.5, 112.9T, 382T, 5680 (Ops 24 hrs)
VDF: 122.2, 126.7, 121.9, 121.5
HIGH ALT IFR: 132.1

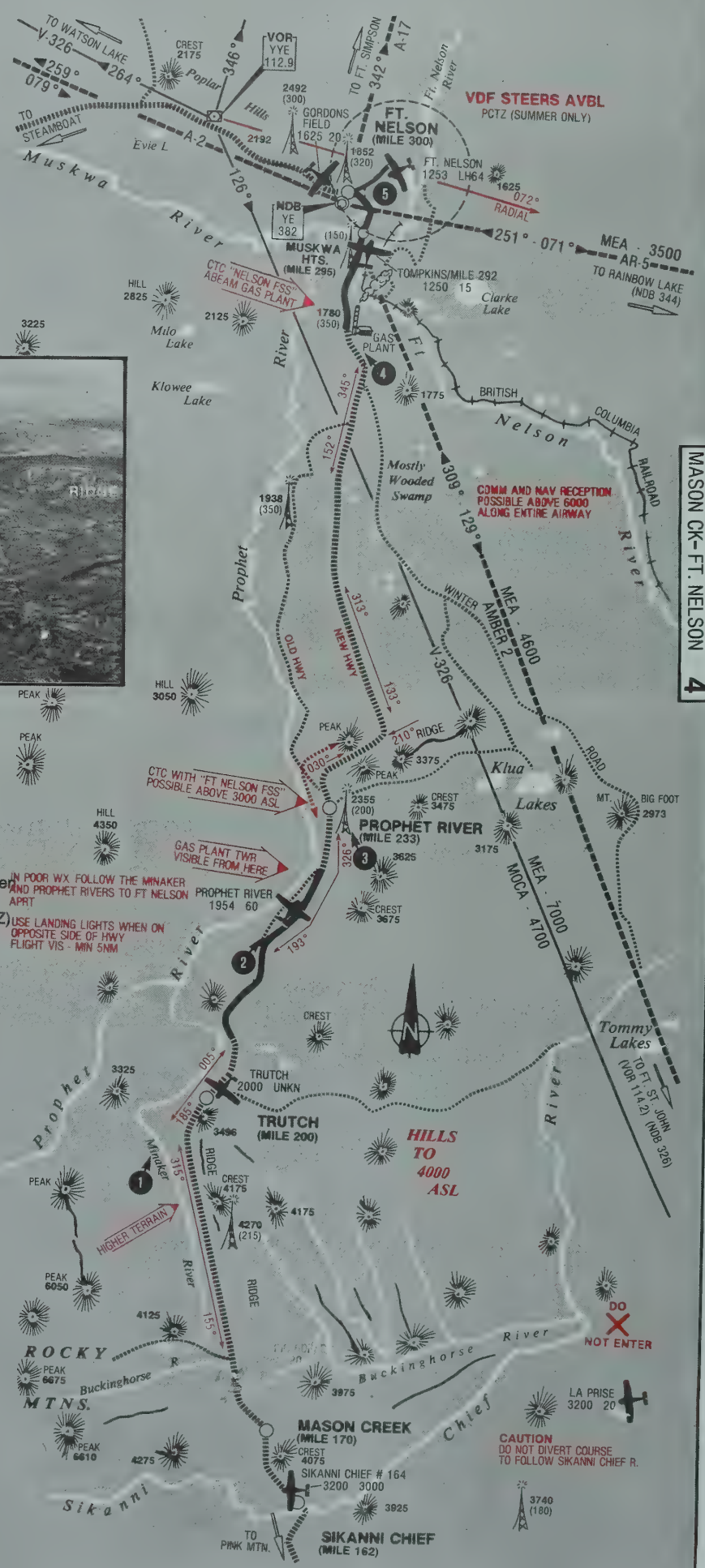
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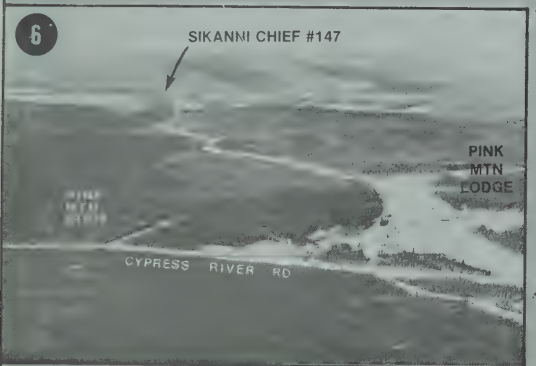
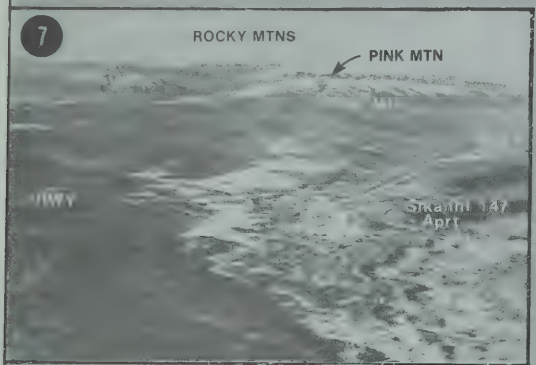
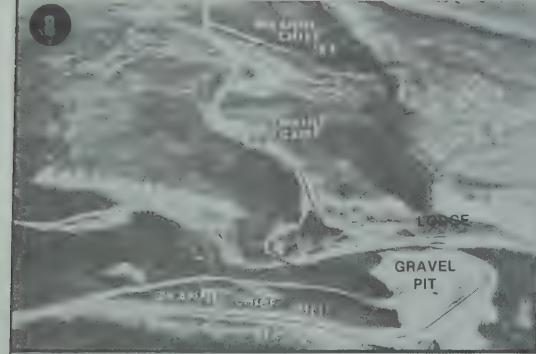
MINIMUM SUGGESTED VFR ALTITUDE

4800 ASL - Mason Creek to Trutch
3800 ASL - Trutch to Prophet River Town
2800 ASL - Prophet River Town to Ft. Nelson

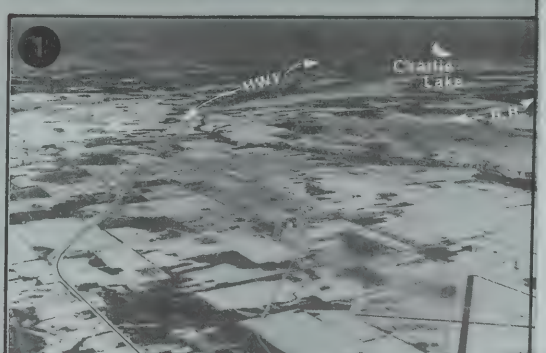
MINIMUM RADIO RECEPTION ALT.

6000 ASL - Pink Mtn. to Prophet River (Nelson FSS)
4000 ASL - Trutch to Prophet River (Nelson FSS)
2500 ASL - Prophet River to Ft. Nelson (Nelson FSS)





FT. ST. JOHN COMMUNICATIONS
TWR: 118.5 within 20NM (FSS when TWR clsd)
GND: 121.9 (Ops 14-06Z dly)
FSS: 126.7, 122.5, 114.2T, 326T (Ops 24 hrs)
VDF: 118.5, 121.9, 121.5 (Twr hrs only)
HIGH ALT IFR: 132.6



FT. ST. JOHN - MASON CK 3
MASON CK - FT. NELSON 4

FT. ST. JOHN - MASON CK 3
MASON CK - FT. NELSON 4

MILAGES

FT. NELSON DIRECT V-326 TO
LIARD RIVER THENCE RIVER
ROUTE & HWY TO WATSON LK.

	FT. NELSON	WATSON LAKE
FT. NELSON APRT	0	241
VOR	14	227
V-326 AND LIARD RIVER JUNCTION	80	161
LIARD RIVER & NDB VIA RIVER	131	110
LIARD STRIP	139	102
COAL RIVER	159	82
FIRESIDE	167	74
HYLAND POST CROSSING	214	27
LOWER POST VILLAGE	226	15
WATSON LAKE APRT	241	0

FT. NELSON TO VOR THENCE
286° RADIAL TO NELSON FORKS
THENCE VIA RIVER AND HWY
TO WATSON LAKE

	FT. NELSON	WATSON LAKE
FT. NELSON APRT	0	262
VOR	14	248
NELSON FORKS	64	198
HELLS GATE (Via River)	109	153
LIARD NDB	152	110
WATSON LAKE	262	0

Add 20NM to distance between
airport and Nelson Forks if
following the Ft Nelson River
immediately after departing the
Ft. Nelson airport.

VIA AMBER 2	FT. NELSON	WATSON LAKE
FT. NELSON	0	210
FT. NELSON NDB	4	206
LIARD NDB	117	93
WATSON LAKE NDB/APRT	210	0

VIA V-326	FT. NELSON	WATSON LAKE
FT. NELSON APRT	0	206
FT. NELSON VOR	14	192
LIARD RIVER (DEER INTX)	116	90
WATSON LAKE VOR/APRT	206	0

MINIMUM SUGGESTED VFR ALTITUDES

3000 ASL - Ft Nelson, 286° Radial to Nelson Forks

2000 ASL - Ft Nelson via River to Nelson Forks

2400 ASL - Nelson Forks to Liard

MINIMUM RADIO RECEPTION ALT.

5000 ASL - Ft Nelson to Nelson Forks (Nelson FSS)

8000 ASL - Ft Nelson to Liard/Toad River Jct. (Nelson FSS)

8000 ASL - Nelson Forks to Hell Gate (Nelson FSS)

4000 ASL - Hell Gate to Liard (Watson FSS)

FT. NELSON COMMUNICATIONS

TWR: 118.7 within 15NM (FSS when
Twr closed)

GND: 121.9 Ops 14-04Z (DT 13-03Z)

May 15th - Oct. 31st

FSS: 126.7, 122.2, 121.5, 112.9T,

382T, 5680 (Ops 24 hrs)

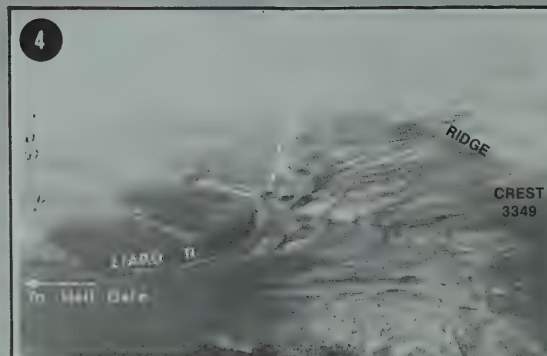
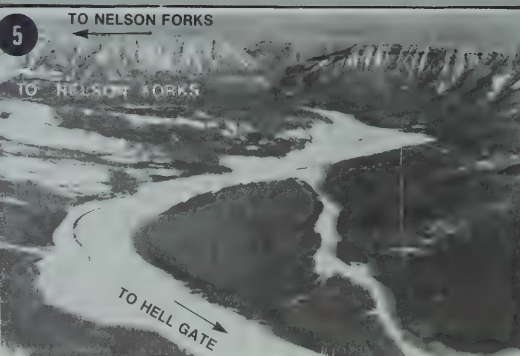
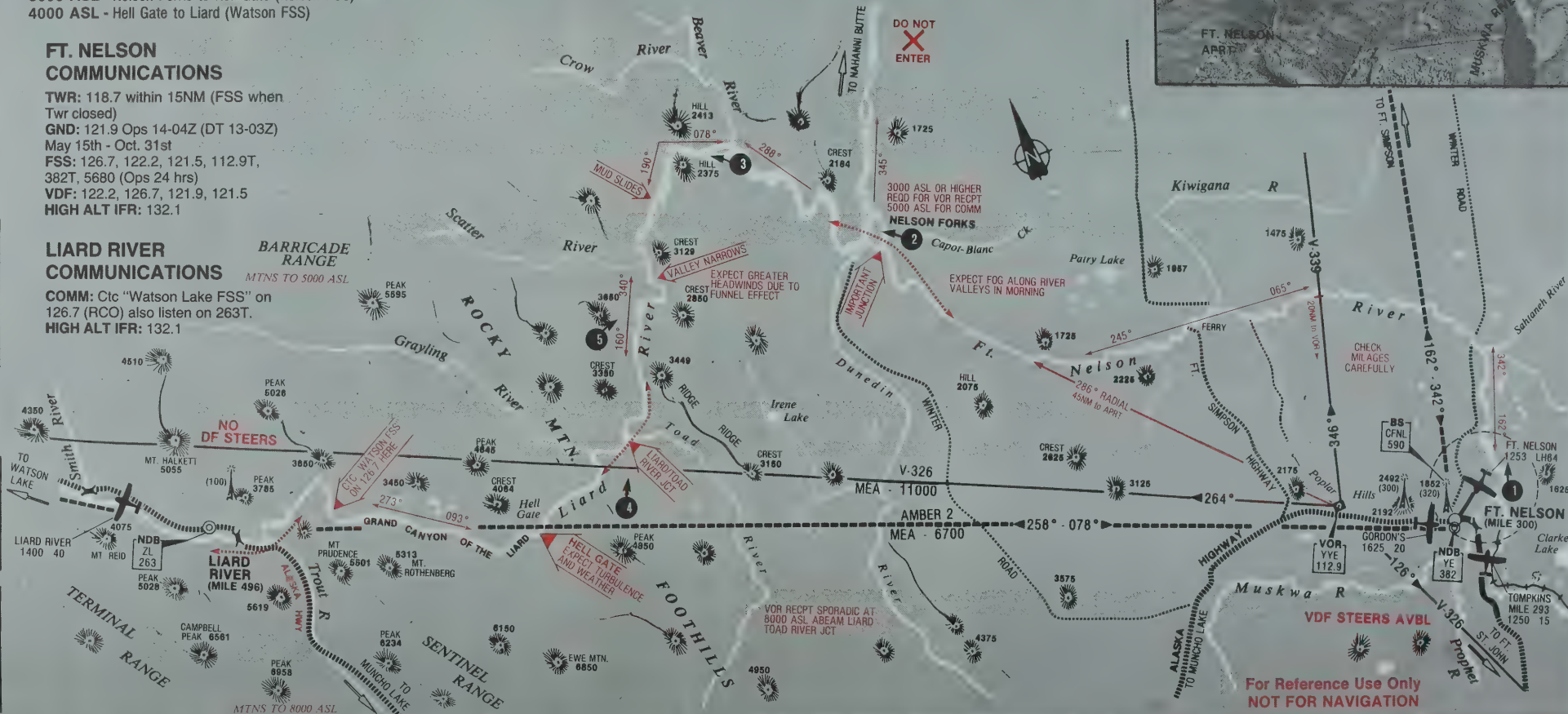
VDF: 122.2, 126.7, 121.9, 121.5

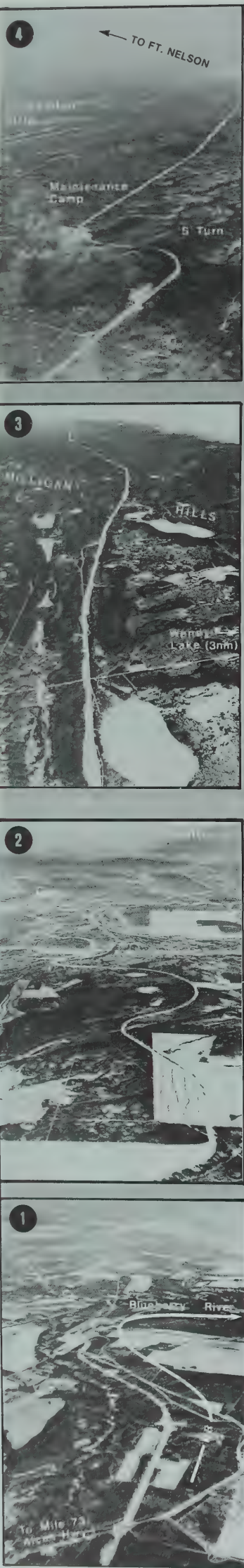
HIGH ALT IFR: 132.1

LIARD RIVER COMMUNICATIONS

COMM: Ctc "Watson Lake FSS" on
126.7 (RCO) also listen on 263T.

HIGH ALT IFR: 132.1





FT. ST. JOHN COMMUNICATIONS
TWR: 118.5 within 20NM (FSS when TWR clsd)
GND: 121.9 (Ops 14-06Z dly)
FSS: 126.7, 122.5, 114.2T, 326T (Ops 24 hrs)
VDF: 118.5, 121.9, 121.5 (Twr hrs only)
HIGH ALT IFR: 132.6

For Reference Use Only
NOT FOR NAVIGATION

MINIMUM SUGGESTED VFR ALTITUDE
3100 ASL - Ft. St. John to Blueberry
3400 ASL - Blueberry to Milligan Hills
3000 ASL - Milligan Hills to Fontas
2500 ASL - Fontas to Ft. Nelson

MINIMUM RADIO RECEPTION ALT.
3100 ASL - Ft. St. John to Blueberry (John FSS)
5500 ASL - Blueberry to Milligan Hills (John FSS)
3000 ASL - Milligan Hills to Ft. Nelson (Nelson FSS)

FT. NELSON COMMUNICATIONS
TWR: 118.7 within 15NM (FSS when Twr closed)
GND: 121.9 Ops 14-04Z (DT 13-03Z) May 15th - Oct. 31st
FSS: 126.7, 122.2, 121.5, 112.9T, 382T, 5680 (Ops 24 hrs)
VDF: 122.2, 126.7, 121.9, 121.5
HIGH ALT IFR: 132.1



MILAGES

VIA RAILROAD	FT. ST. JOHN	FT. NELSON
FT. ST. JOHN	0	195
YXJ 326 NDB	4	191
BLUEBERRY RIVER	32	113
BLUEBERRY 363 NDB	37	158
BEATTON RIVER	70	125
ADJ BEATTON RIVER AIRSTRIP	79	116
MILLIGAN HILLS (Wendy Lake)	88	107
R.R. MAINT. CAMP ("S" TURN)	109	86
NITEAL CREEK	134	61
FONTAS	145	50
ABEAM CLARKE LAKE	182	13
FT. NELSON	195	0

VIA AIRWAY AMBER 2	FT. ST. JOHN	FT. NELSON
FT. ST. JOHN	0	171
ST. JOHN 326 NDB	4	167
BLUEBERRY 363 NDB	35	136
SIKANNI RIVER	108	63
KLUA LAKES	124	43
FT. NELSON 382 NDB	167	4
FT. NELSON APRT	171	0

VIA AIRWAY V-326	FT. ST. JOHN	FT. NELSON
FT. ST. JOHN	0	176
VOR	6	170
BLUEBERRY 363 NDB	36	140
ABEAM LA PRISE CK	80	96
SIKANNI RIVER	106	70
KLUA LAKES	125	50
JCT MUSKWA/ LOC 110.3 MHZ	166	10
FT. NELSON APRT	176	0

JOHN - NELSON VIA RAIL 5
NELSON - LIARD (RIVER) 6

MILAGES		
VIA HIGHWAY	FT. NELSON	WATSON LAKE
FT. NELSON	0	265
VOR	14	251
STEAMBOAT	40	225
SUMMIT LAKE	70	195
TOAD RIVER	95	170
MUNCHO LAKE	120	145
LIARD NDB	155	110
LIARD APRT	163	102
COAL RIVER	183	82
FIRESIDE	191	74
HYLAND RIVER	238	27
LOWER POST	250	15
WATSON LAKE APRT	265	0

MILAGES		
VIA HIGHWAY	FT. NELSON	WATSON LAKE
FT. NELSON	0	265
VOR	14	251
STEAMBOAT	40	225
SUMMIT LAKE	70	195
TOAD RIVER	95	170
MUNCHO LAKE	120	145
LIARD NDB	155	110
LIARD APRT	163	102
COAL RIVER	183	82
FIRESIDE	191	74
HYLAND RIVER	238	27
LOWER POST	250	15
WATSON LAKE APRT	265	0

VIA V-326	FT. NELSON	WATSON LAKE
FT. NELSON APRT	0	206
FT. NELSON VOR	14	192
LIARD RIVER (DEER INTX)	116	90
WATSON LAKE VOR/APRT	206	0

VIA AMBER 2	FT. NELSON	WATSON LAKE
FT. NELSON	0	210
FT. NELSON NDB	4	206
LIARD NDB	117	93
WATSON LAKE NDB/APRT	210	0

FT. NELSON-LIARD RIVER 7
LIARD R. - WATSON LAKE 8

**LIARD RIVER
COMMUNICATIONS**

COMM: Ctc "Watson Lake FSS"
126.7 (RCO) also listen on 263T
HIGH ALT IFR: 132.1

FT. NELSON-LIARD RIVER 7
LIARD R. - WATSON LAKE 8

**LIARD RIVER
COMMUNICATIONS**

COMM: Ctc "Watson Lake FSS"
126.7 (RCO) also listen on 263T
HIGH ALT IFR: 132.1

MINIMUM SUGGESTED VFR ALT.
 4200 ASL - Ft Nelson to Steamboat
 5200 ASL - Steamboat to Summit Lodge
 6000 ASL - Summit Lake to Liard River

MINIMUM RADIO RECEPTION ALT.
 4000 ASL - Ft. Nelson to Steamboat (Nelson FSS)
 10000 ASL - Steamboat to Liard River (Nelson FSS)

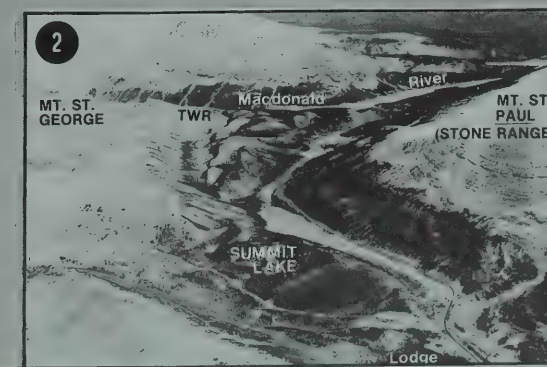
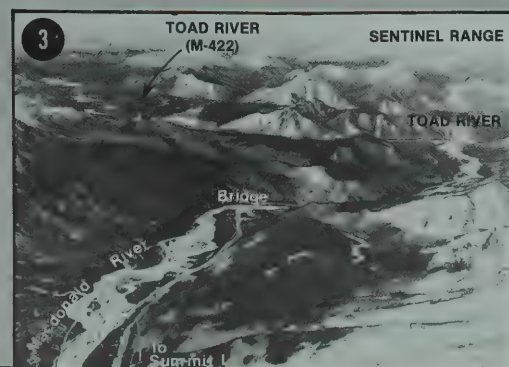
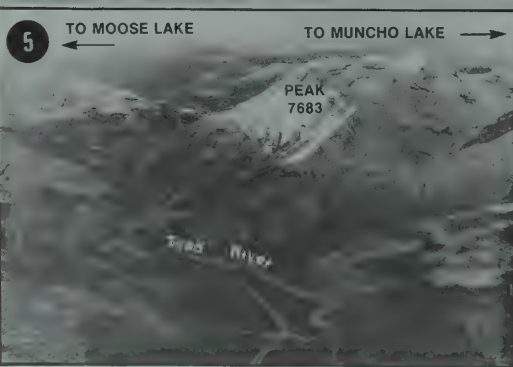
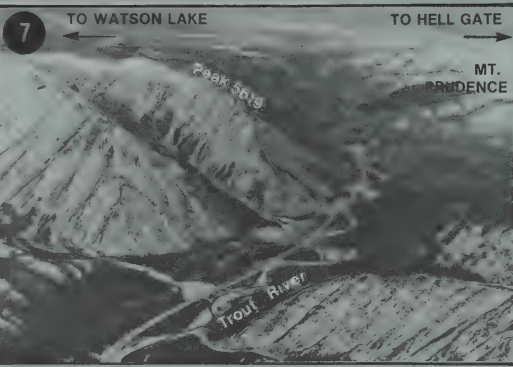
4200 ASL - Ft Nelson to Steamboat
5200 ASL - Steamboat to Summit Lodge
6000 ASL - Summit Lake to Liard River

MINIMUM RADIO RECEPTION ALT.
4000 ASL - Ft. Nelson to Steamboat (Nelson FSS)
10000 ASL - Steamboat to Liard River (Nelson FSS)



TWR: 118.7 **GND:** 121.0 Ops 14-04Z
(DT 13-03Z)dly May 2 - Aug 31
FSS: 126.7 (EXT RNG) 122.2, 122.1(R),
112.9(T), 121.5
VDF: 122.2, 126.7, 121.9, 121.5
HIGH ALT IFR: 132.1

TWR: 118.7 **GND:** 121.0 Ops 14-04Z
(DT 13-03Z)dly May 2 - Aug 31
FSS: 126.7 (EXT RNG) 122.2, 122.1(R),
112.9(T), 121.5
VDF: 122.2, 126.7, 121.9, 121.5
HIGH ALT IFR: 132.1

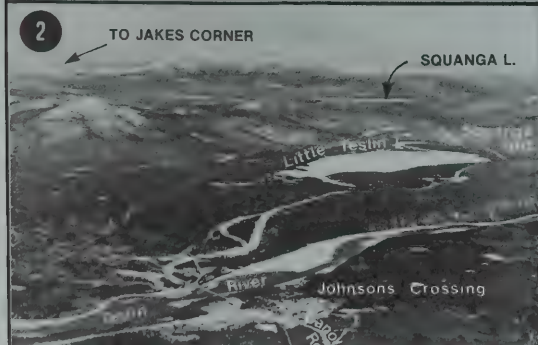
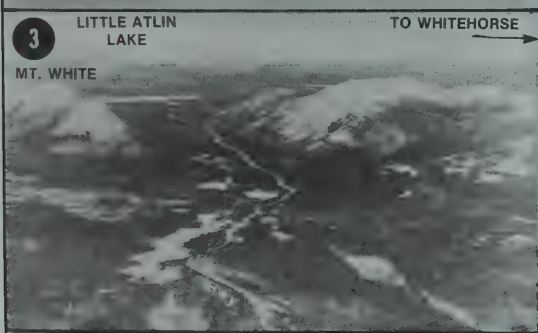
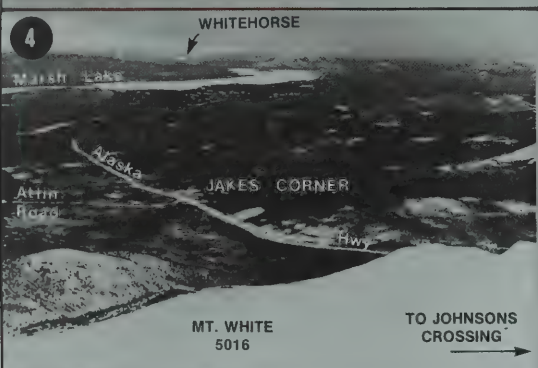


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WHITEHORSE COMMUNICATIONS
TWR: 118.3 within 20NM (FSS when Twr closed)
GND: 121.9, 121.5 Ops 15-07Z (DT 14-06Z) dly. O/T 1 hr. notice
FSS: 126.7, 122.5, 121.5, 116.6T, 302T, 5680 (Ops 24 hrs)
VDF: 118.3, 121.9, 122.5, 121.5 (Twr hrs only)
HIGH ALT IFR: 132.1

TESLIN COMMUNICATIONS
FSS: 122.2 within 20NM. O/T on 126.7 121.5, 269T. Ops 1630-0030Z Mon.-Fri. Ctc with "Whitehorse FSS" possible above 6000 ASL on 126.7 when "Teslin FSS" closed
HIGH ALT IFR: 132.1



MILAGES

RED 5 TO WHITEHORSE VIA TESLIN

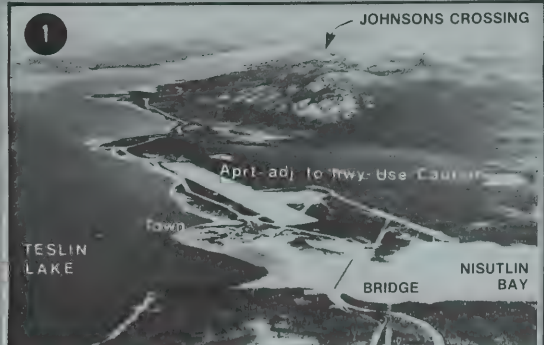
	WATSON LAKE	WHITE HORSE
WATSON APRT	0	195
WATSON NDB	3	192
TESLIN NDB	116	79
WHITEHORSE NDB	195	0

V-444 TO WHITEHORSE VIA TESLIN

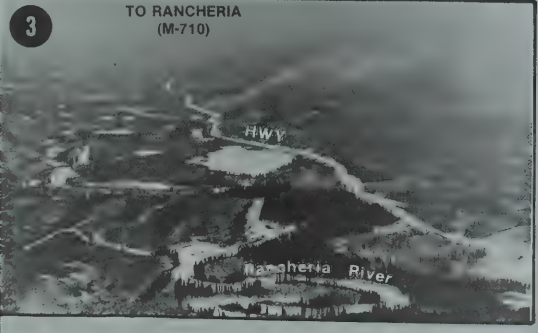
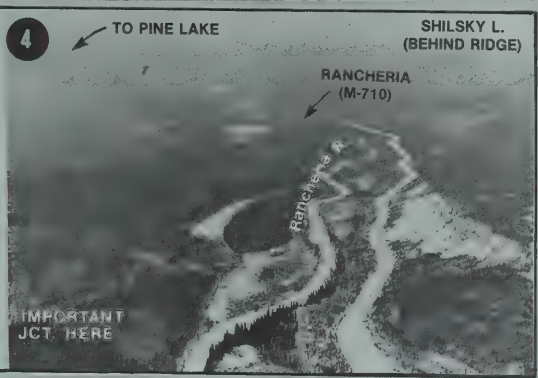
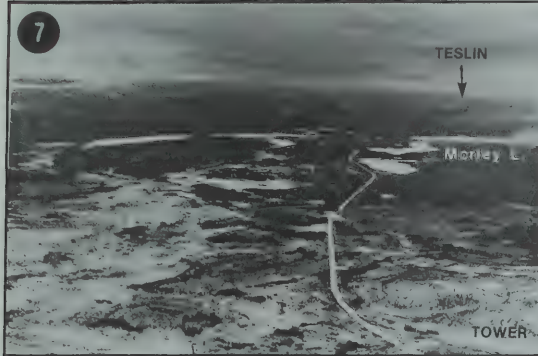
	WATSON LAKE	WHITE HORSE
WATSON LAKE	0	204
WATSON VOR	2	202
TESLIN NDB	115	89
WHITEHORSE VOR	195	9
WHITEHORSE APRT	204	0

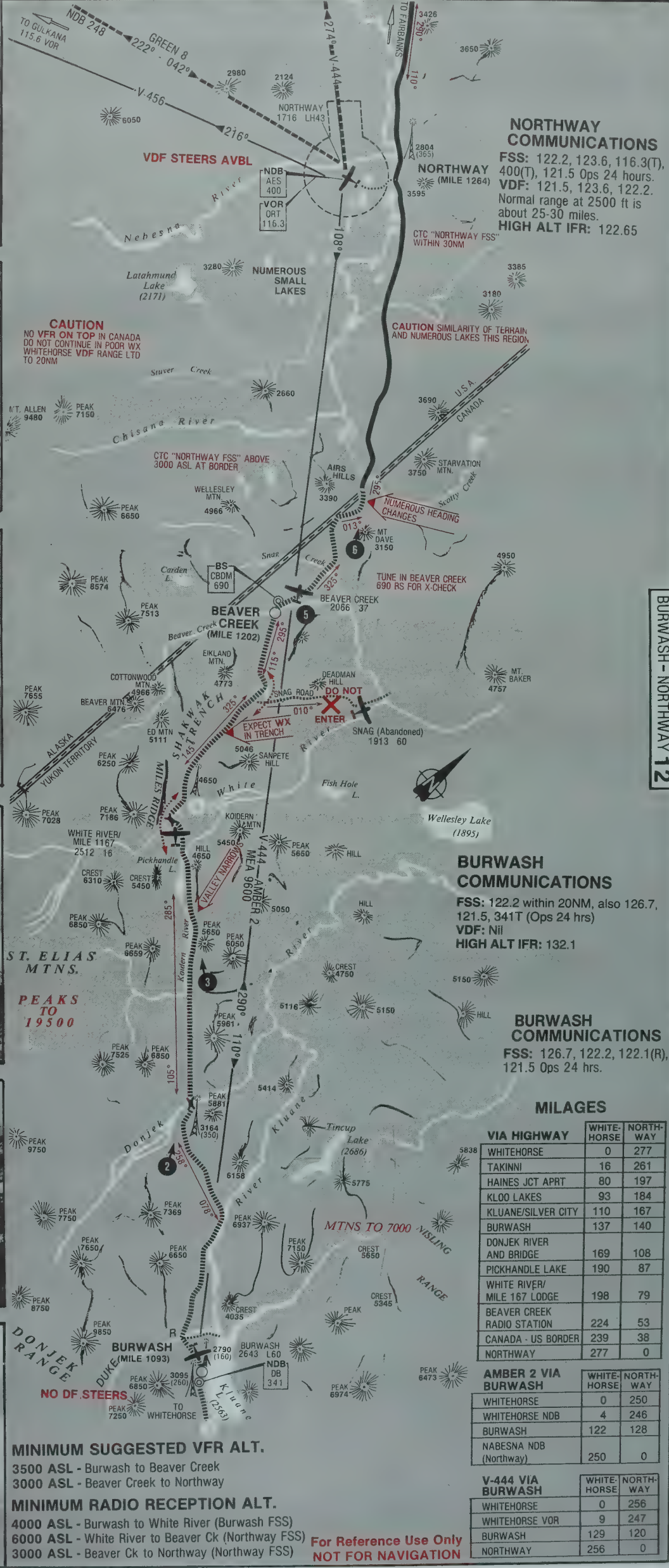
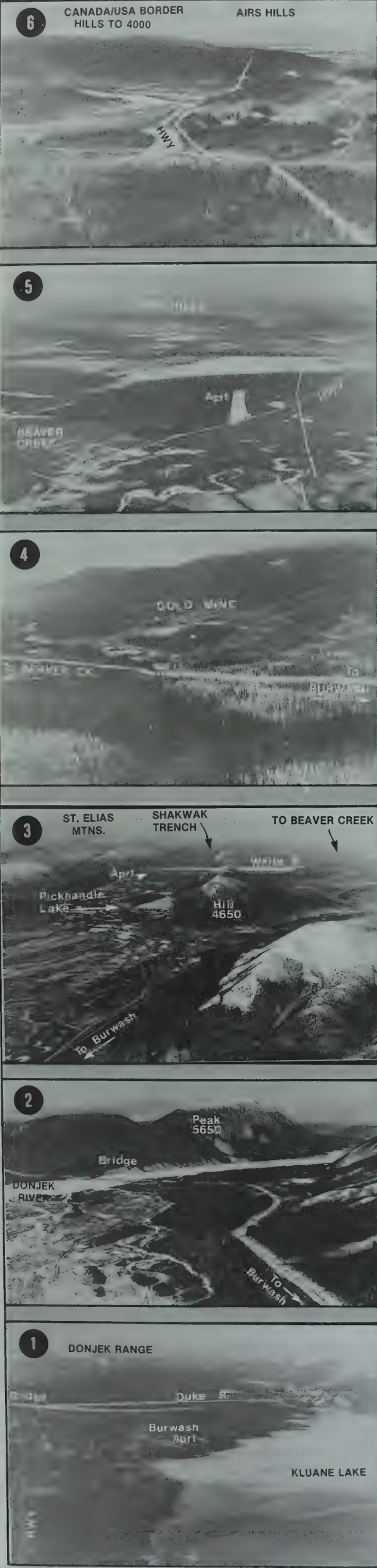
VIA HIGHWAY

	WATSON LAKE	WHITE HORSE
WATSON LAKE	0	224
RANCHERIA	39	185
SHILSKY LAKE	61	163
PINE LAKE APRT	69	155
SWIFT RIVER RD 970	79	145
SWAN LK/SIMPSON PK	89	135
SMART LAKE	101	123
MORLEY LAKE	113	111
TESLIN NDB	132	92
JOHNSON CROSSING	161	63
JAKES CORNER	182	42
POWER DAM	208	16
WHITEHORSE	224	0



MINIMUM SUGGESTED VFR ALT.
 3500 ASL - Teslin to Whitehorse
MINIMUM RADIO RECEPTION ALT.
 3500 ASL - Teslin to Johnsons Crossing (Teslin FSS)
 7000 ASL - Johnsons Crossing to Marsh Lake (Whitehorse FSS)
 3500 ASL - Marsh Lake to Whitehorse (Whitehorse FSS)
 8000 ASL - Teslin to Whitehorse (Whitehorse FSS)





MINIMUM SUGGESTED VFR ALT.

3500 ASL - Burwash to Beaver Creek
3000 ASL - Beaver Creek to Northway

MINIMUM RADIO RECEPTION ALT.

4000 ASL - Burwash to White River (Burwash FSS)
6000 ASL - White River to Beaver Ck (Northway FSS)
3000 ASL - Beaver Ck to Northway (Northway FSS)

For Reference Use Only
NOT FOR NAVIGATION

NORTHWAY COMMUNICATIONS

FSS: 122.2, 123.6, 116.3(T), 400(T), 121.5 Ops 24 hours.
VDF: 121.5, 123.6, 122.2.
Normal range at 2500 ft is about 25-30 miles.
HIGH ALT IFR: 122.65

BURWASH COMMUNICATIONS

FSS: 122.2 within 20NM, also 126.7, 121.5, 341T (Ops 24 hrs)
VDF: Nil
HIGH ALT IFR: 132.1

BURWASH COMMUNICATIONS

FSS: 126.7, 122.2, 122.1(R), 121.5 Ops 24 hrs.

MILAGES

VIA HIGHWAY	WHITE-HORSE	NORTH-WAY
WHITEHORSE	0	277
TAKINNI	16	261
HAINES JCT APRT	80	197
KLOO LAKES	93	184
KLUANE/SILVER CITY	110	167
BURWASH	137	140
DONJEK RIVER AND BRIDGE	169	108
PICKHANDLE LAKE	190	87
WHITE RIVER/ MILE 167 LODGE	198	79
BEAVER CREEK RADIO STATION	224	53
CANADA - US BORDER	239	38
NORTHWAY	277	0

AMBER 2 VIA BURWASH	WHITE-HORSE	NORTH-WAY
WHITEHORSE	0	250
WHITEHORSE NDB	4	246
BURWASH	122	128
NABESNA NDB (Northway)	250	0

V-444 VIA BURWASH	WHITE-HORSE	NORTH-WAY
WHITEHORSE	0	256
WHITEHORSE VOR	9	247
BURWASH	129	120
NORTHWAY	256	0

KLUANE APRT

KLUANE

KLOO LAKE

TO BURWASH

MT. BRATNOBER

CHAMPAGNE

TWR

TO CHAMPAGNE

TO HAINES JCT.

MILAGES

VIA HIGHWAY	WHITE-HORSE	NORTH-WAY
WHITEHORSE	0	277
TAKINNI	16	261
HAINES JCT APRT	80	197
KL00 LAKES	93	184
KLUANE/SILVER CITY	110	167
BURWASH	137	140
DONJEK RIVER AND BRIDGE	169	108
PICKHANDLE LAKE	190	87
WHITE RIVER/ MILE 167 LODGE	198	79
BEAVER CREEK RADIO STATION	224	53
CANADA - US BORDER	239	38
NORTHWAY	277	0

TWR: 118.3 within 20NM (FSS
when Twr closed)
GND: 121.9, 121.5 Ops 15-07Z
(DT 14-06Z) dly. O/T 1 hr. notice
FSS: 126.7, 122.5, 121.5, 116.6T,
302T, 5680 (Ops 24 hrs)
VDF: 118.3, 121.9, 122.5, 121.5 (Twr
hrs only)
HIGH ALT IFR: 132.1

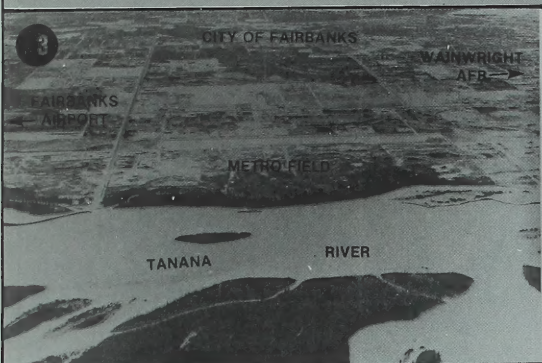
V-444 VIA BURWASH	WHITE- HORSE	NORTH- WAY
WHITEHORSE	0	256
WHITEHORSE VOR	9	247
BURWASH	129	120
NORTHWAY	256	0

AMBER 2 VIA BURWASH	WHITE- HORSE	NORTH- WAY
WHITEHORSE	0	250
WHITEHORSE NDB	4	246
BURWASH	122	128
NABESNA NDB (Northway)	250	0

MINIMUM SUGGESTED VFR ALT.
3000 ASL - Whitehorse to Haines Junction
4000 ASL - Haines Junction to Kluane
3500 ASL - Kluane to Burwash

MINIMUM RADIO RECEPTION ALT.
8000 ASL - Whitehorse to Haines Jct.
 (Whitehorse FSS)
10000 ASL - Haines to Klwane/Silver City
 (Whitehorse or Burwash FSS)
4000 ASL - Klwane to Burwash
 (Burwash FSS)

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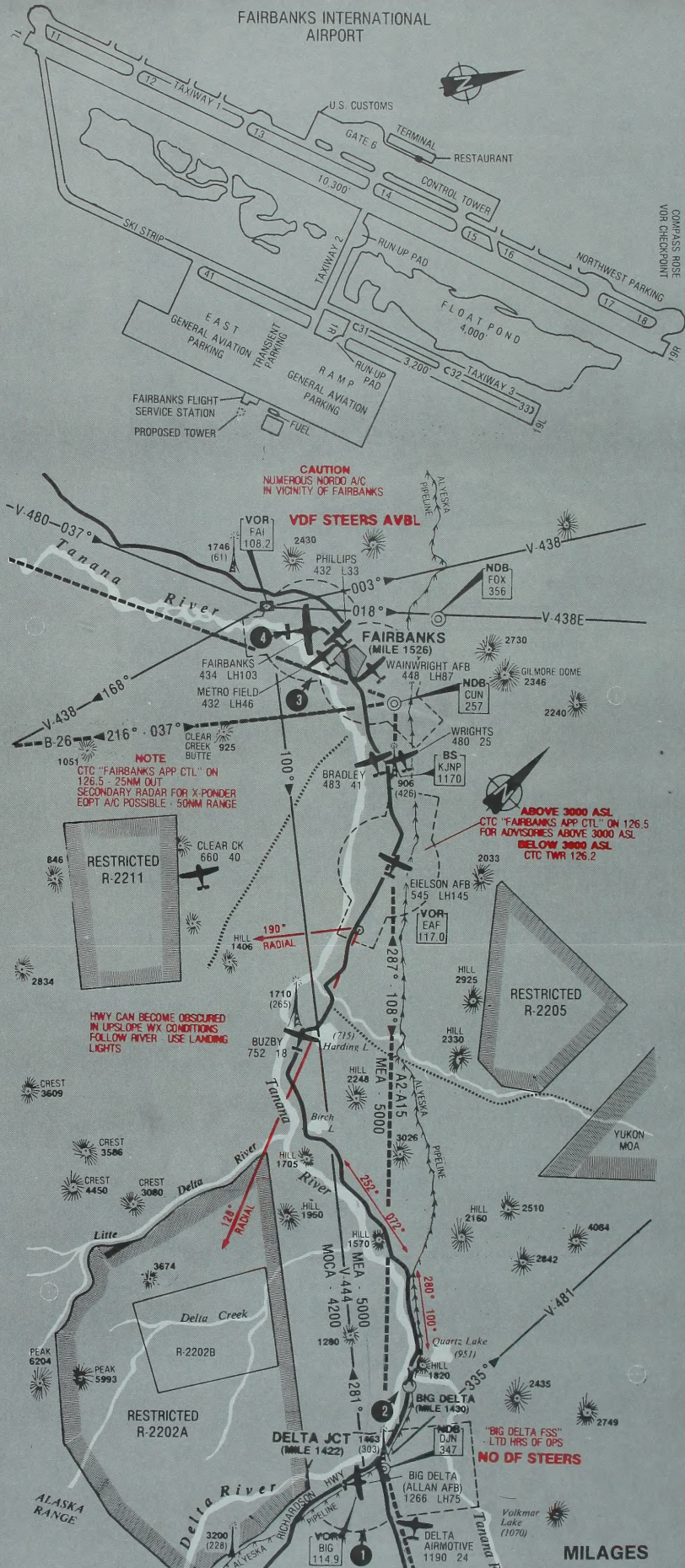
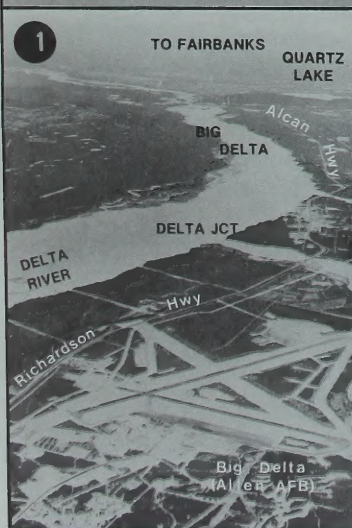
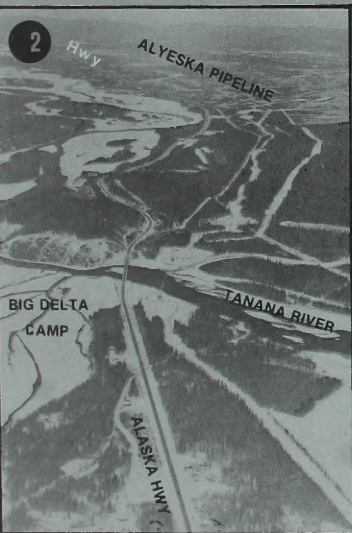
Fairbanks
APP CTL: 126.5 - 25NM out
ATIS: 124.4
TWR: 118.3, 122.5(R) **GND:** 121.9 Ops 24 hrs.
FSS: 122.2, 122.6, 108.2(T), 257(T), 121.5
VDF: For X-ponder Eqpt. A/C **UNICOM:** 123.0

Eielson AFB
APP CTL: 126.5
TWR: 126.2, 121.5 **GND:** 121.8

Wainwright AFB
APP CTL: 126.5
TWR: 125.0, 121.5 **GND:** 121.7

Metro
 Contact "Fairbanks FSS"

Phillips
UNICOM



FSS: 122.2, 123.6, 114.9(T), 347(T), 121.5
Ops 16-0730 (DT 1500-0630Z)
HIGH ALT IFR: 120.3

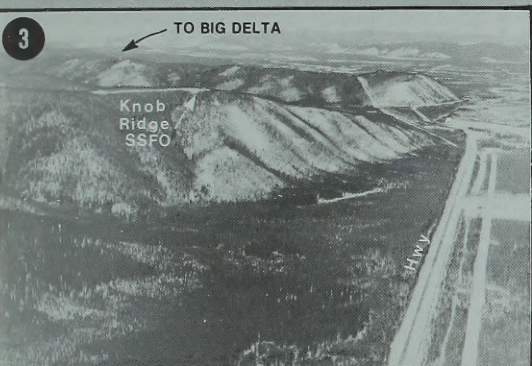
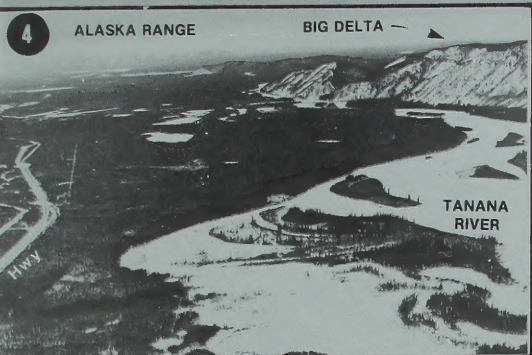
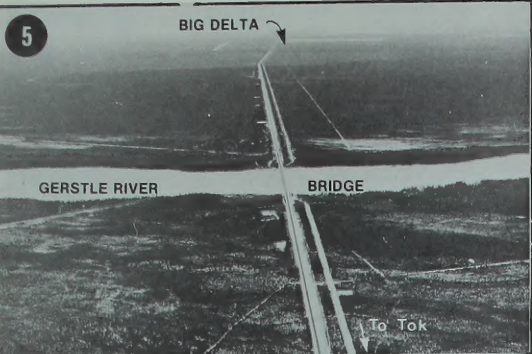
2500 ASL - Big Delta to Fairbanks

MINIMUM RADIO RECEPTION ALT.
3000 ASL - Big Delta to Fairbanks (Fairbanks FS

VIA V-444	NORTH- WAY	FAIR- BANKS
NORTHWAY	0	198
BIG DELTA	121	121
FAIRBANKS	198	0

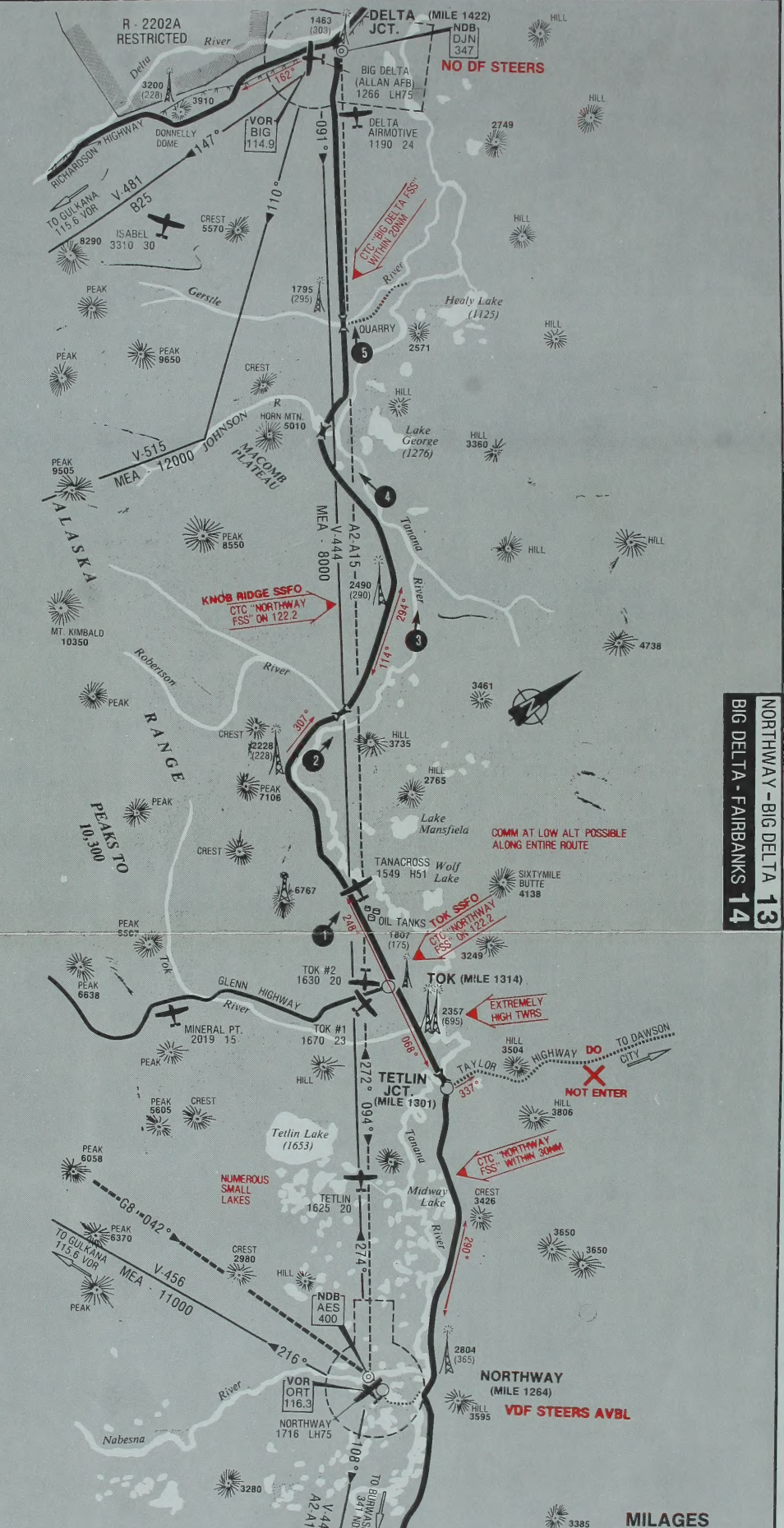
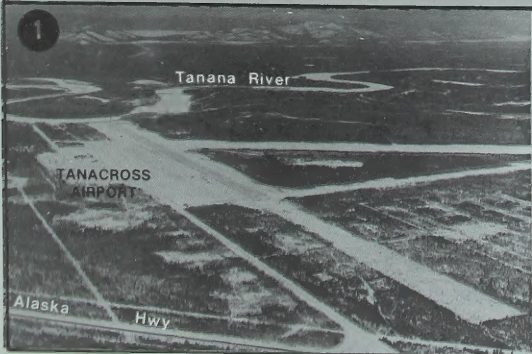
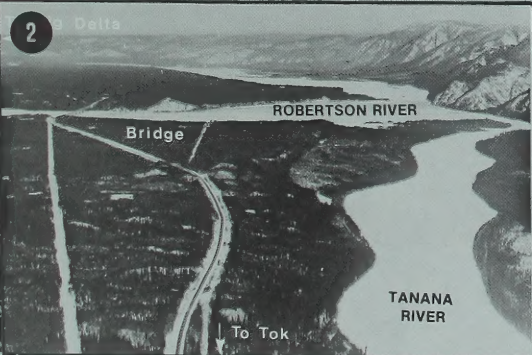
VIA AMBER 2-15	NORTH- WAY	FAIR- BANKS
NORTHWAY	0	197
DELTA JUNCTION	119	78
CHENA NDB	187	10
FAIRBANKS APRT	197	0

MILAGES		
VIA HIGHWAY	NORTH- WAY	FAIR- BANKS
NORTHWAY	0	217
MIDWAY LAKE	22	195
TANANA R. CROSSING	34	183
TOK JUNCTION (RCO)	43	174
TANACROSS APT	52	165
ROBERTSON RIVER AND BRIDGE	72	145
KNOB RIDGE (RCO)	83	134
LAKE GEORGE	104	113
BIG DELTA APT	135	82
BIG DELTA TOWN (Tanana River)	146	71
HARDING LAKE	180	37
EIELSON (AFB) VOR	190	27
FAIRBANKS	217	0



DELTA JUNCTION COMMUNICATIONS
 FSS: 122.2, 123.6, 114.9(T), 347(T), 121.5
 Ops 16-0730 (DT 1500-0630Z)
 HIGH ALT IFR: 120.3

NORTHWAY COMMUNICATIONS
 FSS: 122.2, 123.6, 116.3(T), 400(T), 121.5
 Ops 24 hours
 VDF: 121.5, 123.6, 122.2 Normal range at 2500 ft is about 25-30 miles
 HIGH ALT IFR: 122.65



MINIMUM VFR ENROUTE ALT.
 3000 ASL - Northway to Lake George
 2500 ASL - Lake George to Big Delta

MINIMUM RADIO RECEPTION ALT.
 3000 ASL - Northway to Big Delta (Northway FSS)

VIA V-444			VIA HIGHWAY		
NORTHWAY	NORTHWAY	FAIRBANKS	NORTHWAY	NORTHWAY	FAIRBANKS
0	0	198	0	0	217
121	121	121	22	22	195
198	198	0	34	34	183
			43	43	174
			52	52	165
			72	72	145
			83	83	134
			104	104	113
			135	135	82
			146	146	71
			180	180	37
			190	190	27
			217	217	0

For Reference Use Only
 NOT FOR NAVIGATION

NORTHWAY - BIG DELTA 13
 BIG DELTA - FAIRBANKS 14



Whitehorse airport looking southeast towards Bennett Lake and White Pass. (December 10th)



Liard River and bridge looking west towards Watson Lake. (Mt. Ried adj. south).



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AUTHOR

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